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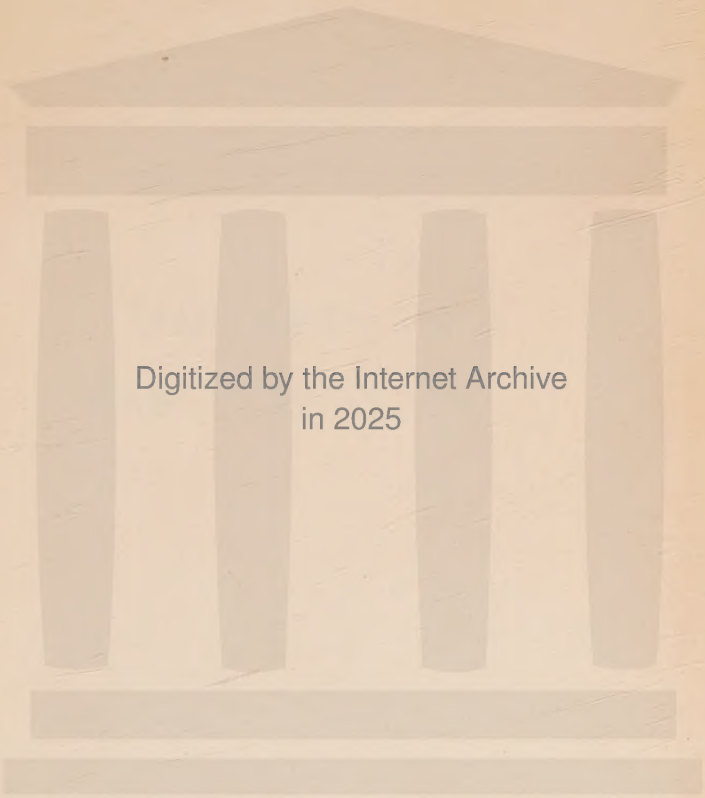

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THE ARTS IN EARLY ENGLAND

Western Tower, Earls Barton, Northamptonshire.

(Frontispiece.)

THE ARTS IN EARLY ENGLAND

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* *

ECCLESIASTICAL ARCHITECTURE IN ENGLAND FROM THE CONVERSION OF THE SAXONS TO THE NORMAN CONQUEST

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Prefatory Note

The present volume is not offered as a history of pre-Conquest architecture. Before the history of a style can be written there must be some general agreement as to the chronology of its monuments. Such a chronology of Saxon buildings has yet to be established, and it is hoped that the notices which follow of examples of English work, with their continental parallels, will be of some aid towards this desirable end.

But even if the chronology of the existing monuments of the period were fixed, a treatment in the true sense historical would still be hardly possible. A history implies development, and in Saxon architecture, as in Saxon civilization generally, there is neither continuous progress nor evolution. In many respects the earlier periods of Saxon Christianity, in the Northumbria of Ecgfrid or the Mercia of Offa, present a picture more attractive than any of the later epochs. Partly owing to the Danish desolation, and partly to a tendency in the Saxon temperament to sink into that inertia which Bede deprecates in his countrymen, there was in Saxon England no continuous advance, but rather alternations of brilliant periods and times of stagnation or decline. In architecture some of the structures

of the pre-Danish epoch seem to have been more ambitious than anything attempted at later dates.

It is accordingly inevitable that a treatment of Saxon buildings on the basis of our present knowledge should take the form of a descriptive survey rather than a history. The survey here offered is a fairly wide one and embraces examples from all periods and all parts of the country, while the map and index list, giving the names and position of examples, may be of service to those who investigate the subject further for themselves.

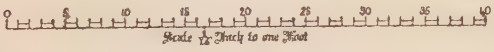
Previous studies embracing the whole field, but without discrimination of periods, are contained in Bloxam's *Ecclesiastical Architecture*, and in the editions of Rickman that ended with the sixth. In the seventh, the current edition, the chapter on Saxon architecture was withdrawn, and the separate appendix that was to take its place has not been issued. Among studies of groups of buildings, the papers in *The Reliquary* of 1893-4 by Mr. C. C. Hodges on the pre-Conquest churches of the ancient Northumbria embrace a larger number of examples than any other recent essay, and the writer hereby acknowledges the assistance he has derived from this source as well as from correspondence with Mr. Hodges, who has readily opened his stores of knowledge about the early churches of the North. There are many published descriptions of special buildings in journals of Archaeological Societies, and references to some of these will be found in the notes to the text, but there has been no effort to form a bibliography of the subject, a work which, considering the varied degrees of value in the papers that would have to be included, is hardly worth attempting.

Apart from this large body of descriptive material, there is a

philosophical treatment of examples from the point of view of the types they offer in Mr. Micklethwaite's paper in the fifty-third volume of the *Archaeological Journal*. This paper was epoch-making in that it introduced for the first time a principle of classification among hitherto disjointed units, and it has greatly furthered the study of this architectural period. The principle of grouping the buildings by types rather than by chronological epochs or districts, in our present state of knowledge the only possible one, has been adopted in these pages.

A considerable part of the matter that follows, with many of the illustrations, have appeared in other forms in *The Builder*, and the writer expresses his thanks to the proprietors of that journal for their ready acquiescence in his desire to re-issue the matter in the present extended shape, as well as for the loan of sundry blocks. Much help has been received in certain points from the notes and drawings of pre-Conquest buildings bequeathed by the late J. T. Irvine to the Society of Antiquaries of Scotland. By the kind permission of the Council of the Society and with the assent of Mrs. Irvine a few of these drawings have been reproduced in the present volume.

The plans, with one or two exceptions noticed when they occur, are all drawn to the same scale, and as they appear on the page are to the scale of one-sixteenth of an inch to a foot. The absolute and the comparative dimensions of the buildings discussed can be obtained from the plans ; and in this connection the subjoined scale of feet may be found useful.



Save where otherwise stated the plans are based on the writer's own measurements and notes, but for evidence of Saxon work

not now visible on the sites reference has been made to published descriptions and plans, many of which were drawn during periods of church restoration when work was uncovered that is now again concealed. Space has not permitted a full discussion of the details of these plans, in which however only these features have been incorporated for which there is good authority.

The method of treatment adopted in the survey is sufficiently explained in the text, and it is hoped that the reader will find assistance in the cross references that have been copiously introduced, as well as in the indices. The citations from 'Vol. I.' refer to the historical volume on *The Life of Saxon England in its Relation to the Arts.*

EDINBURGH, *March*, 1903.

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ERRATUM : p. 86, for 'Fig. 29' read 'page 344.'

Ecclesiastical Architecture in England from the Conversion of the Saxons to the Norman Conquest

CHAPTER I

THE ROMAN AND THE CELTIC SOURCES OF ENGLISH ECCLESIASTICAL BUILDING

In a chapter of the previous volume a place was found for a brief sketch of the ecclesiastical history of the British Isles up to the time of the final conversion of the immigrant Saxons at the close of the seventh century. At the date of the Teutonic descents Romano-British Christianity was an established institution in the country. The invaders crushed it in those eastern and central parts of England which they made their own, but it continued to flourish in the west where it was effectively represented by the Church of Wales. Irish Christianity, and that of southern Scotland as introduced by Ninian, appear to have been in their origin independent of the Romano-British Church, and rested rather on Gaul as their basis; but after the accession of strength gained by the Church in Wales when the whole Christianity of Roman Britain was as it were forced in to it by the heathen impact from the east, the Churches of Cornwall, Wales, southern Scotland, and Ireland may be regarded as representing one extensive body of Celtic Christianity centering first in Wales and afterwards in Ireland, a Christianity that had maintained forms and traditions which had come to differ from those prevalent in the Romanized west. Saxon Christianity had its definite beginnings at the close of the sixth century and its annals

for the succeeding hundred years are recounted with some detail in the *Ecclesiastical History* of Bede.

There are accordingly three classes of Early Christian buildings of which the monumental history of these islands must take account, (1) the remains, if any exist, of Romano-British churches prior to the Saxon invasion; (2) structures built and used by Celtic Christians in the non-Romanized parts of the islands; (3) Saxon churches erected subsequent to the conversion of the invaders. Of these the first must be sought within the bounds of the Britannic provinces, the second in the western and northern portions of Great Britain and more especially in Ireland, and the third in Teutonized England, that is in the eastern and central portions of the island as far north as the Firth of Forth. It has already been made clear that Roman, Romano-Gallic, and Celtic influences were all brought to bear on early Saxon Christianity. It will be well therefore, before embarking on the monumental history of the latter, to gain some idea of the manner of planning and building practised at the time in the north-western provinces of the Roman Empire as well as in the non-Romanized Celtic lands.

It is proposed to deal here briefly, first, with the materials and technique of pagan Roman buildings especially in Britain and with the normal plans of Romano-Christian buildings throughout the Empire, and, second, with Celtic building traditions as they are illustrated for us in Ireland. It should be explained that in the following paragraphs account has only been taken of those features of Roman and Celtic work which have a distinct bearing on that of Saxon times.

I. The Roman Sources.

There is no fact connected with ancient Rome that is more characteristic than the uniformity of technique in her great public works which arose in all the lands under her sway. Broadly speaking, the methods of choosing, preparing, and

employing materials are the same in all the provinces of the Empire, on the Euphrates as in Spain, in Africa as in Britain, so that the work in our own country is in all essentials exactly what we meet with in northern Gaul and on the Rhine and the Moselle.

In the matter of technique Roman work is uniform, and as a rule uniformly good. It is however a mistake to suppose that genuine Roman construction is invariably marked by great accuracy of technique. An examination of the old Roman pharos or lighthouse-tower within the castle precincts at Dover shows that there may be exceptions to this general rule. The monument in question has been greatly knocked about and patched at various epochs, but some original portions of it, which are still as the Roman workmen left them, are roughly and unevenly wrought. At the same time, though haste or economy, or a shortcoming in the supply of materials, may at times have lowered the standard of execution, yet genuine Roman building is always the work of men who have learned their business, and possess the advantage of well understood technical traditions. A Roman arch may be rudely put together, but no one can doubt that the constructor understood the principle of cutting and placing voussoirs.

In the matter of different materials and of the methods of their employment, we find represented among the Roman remains in England (1) the 'opus quadratum,' or construction with large squared stones; (2) the massif of rubble concrete or 'structura caementicia' faced with small parallelepiped stones with or without bonding courses of brick; (3) the 'opus testaceum' where the fabric or skin of a structure is of brick; (4) the plain wall of irregular stone-work with no special facing or technique; and finally (5) the light partition of wood-work and plaster. The following brief notes on these materials and methods contain some facts of which we shall need to take account.

As an example of Roman opus quadratum the jamb of a Roman gateway still standing at the station of Cilurnum

(Chesters) on the Northumbrian Wall may be taken as typical (Fig. 1). Some noble specimens of massive Roman stonework have just come to light at Castlecary near Falkirk.

In some of our Roman structures very large stones may be found employed as footing, or to form the upright jambs

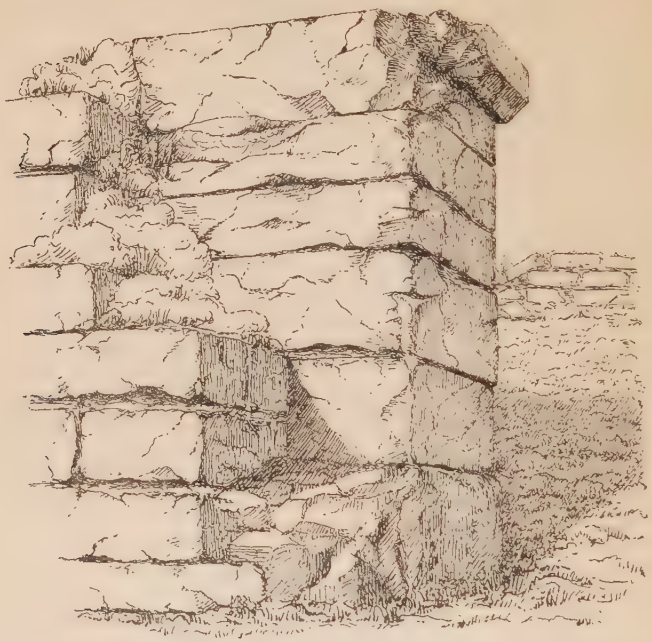


Fig. 1.—Jamb of Roman Gateway at Chesters, on the North Tyne.

and sills or lintels of doorways, and these vertical and horizontal pieces are occasionally mortised into each other after the fashion shown in Fig. 2, where the slabs lining the doorway measure more than 6 ft. in height by 2 ft. 6 in. in width, and have a ridge cut out along their top to fit into a corresponding groove in the lintel, which has now disappeared.

One peculiarity of the large squared stones used in this class of work is their tooling. They are often scored by the pick with diagonal indentations that sometimes cross each other so as to form diamonds, or with more deeply marked semi-

circular grooves forming sometimes a sort of pattern. See Fig. 3. It is advisable to take note of this Roman treatment of the surfaces of stones, as it enables Roman stones to be recognized when re-used, as is so often the case, in Saxon walling. The tooling on such re-used stones has sometimes been signalized as 'Saxon.'

Fig. 2.—Roman Doorway at Chesters on the North Tyne, showing the jambs mortised into the sill and lintel.

The Roman method of construction in rubble concrete is represented abundantly in Britain in walls both of a civil and a military character. The regular small squared stones, with which these are commonly faced, give them a very distinctive character. Lines of brickwork composed of two or three flat tiles superimposed occur very commonly at intervals of a few feet. The mortar in which the small stones or bricks are set is often compounded with coarsely pulverized tiles.

Roman brickwork is less common in the north of Britain than in the south, but it is not unknown in the higher latitudes.

There is evidence of its use on more than one site in Scotland, and quite recently it has been found as far north as the Roman station at Inchtuthil in Perthshire, where has come to light a Roman bath. The north however has always been a stone country, and in all the structures connected with the Roman Wall between the Tyne and Solway this is the material par

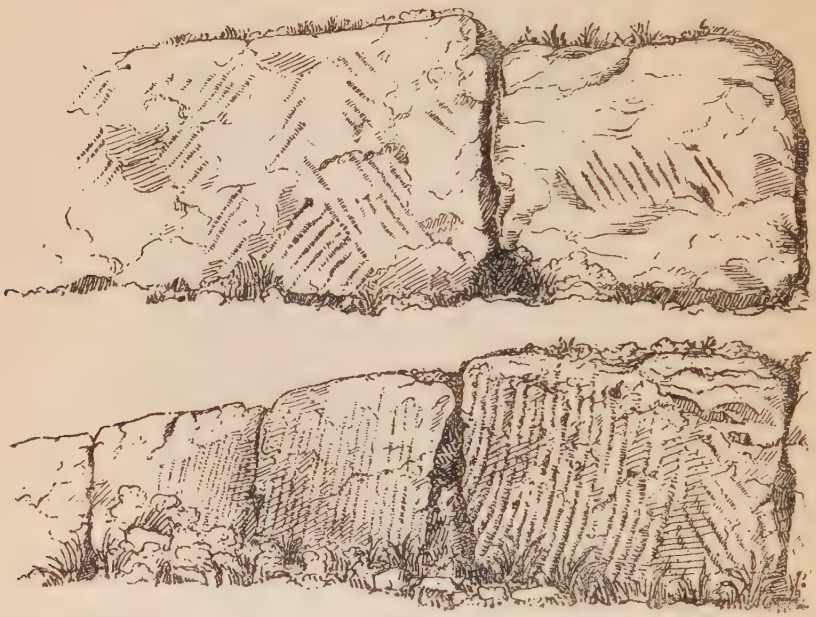


Fig. 3.—Tooling on Roman Stones in the Northumberland Wall.

excellence. We find here walling of large squared stones and of smaller material very carefully cut and set, but the stations on the Tyne also furnish partition walls of rubble stonework not specially faced, that resemble walls found in Roman villas all over the country. These walls differ from the regularly faced ones by their thinness and slightness of technique. They are commonly from 1 foot to 2 feet thick, whereas the faced walls, as must necessarily follow from their technique, are far stouter.

In Roman wall construction in squared stone work as a

general rule no special technique is observable at the quoins, which are usually carefully made up in the same material as the walling. The peculiar Anglo-Saxon quoining which goes by the name of 'long and short work' is certainly not in evidence in Roman buildings in this country.

The use of plaster is of course abundant. A special kind is made with pounded tiles and is red throughout, not merely flecked with the red of testacean fragments. It is very hard and impervious to water and is used for the lining of bath chambers and for floors as well as for the coating of walls generally. The term 'opus signinum' is commonly applied to it. The deeply scored tooling on Roman stones already referred to was perhaps originally intended to afford a key for plaster, though it appears on stones that never seem to have been so coated. The wood-and-plaster partition walls mentioned above have left their traces in some domestic buildings excavated at Silchester.[1]

The employment of cut stone work for arches, and of rubble concrete for vaults, was no doubt as common in this country as elsewhere in Romanized lands. The Roman bridges of which Bede writes need not all have been arched structures, as they may have consisted, like Rochester Bridge in Saxon times, in piers of masonry with a superstructure of woodwork,[2] but some of those in chief use were no doubt of masonry throughout. No arch of a Roman bridge survives in this country but portions of the stone piers of Roman bridges are still to be seen, as for example near Chollerford on the North Tyne.

The best existing Roman arch of stonework in the solid opus quadratum is the already noticed Newport arch at Lincoln, the only complete gate of a Roman city that still survives in situ and in use.[3] A small chamber vaulted with large stones roughly cut in voussoir fashion still exists at Cilurnum on the North Tyne, but Roman vaults were in general far more frequently of concrete than of cut stone. In our own country the existing

[1] *Archaeologia*, LVI, 243. [2] Vol. I, p. 82. [3] Vol. I, p. 58 f.

remains of such vaults are very scanty. We possess nothing resembling the great vaulted chambers of the Thermae by the Musée Cluny at Paris. In Britain the most important interior that is known to have been vaulted is a chamber at Uriconium to the south of the Basilica, measuring 49 ft. by 33 ft. Traces indicate that this was vaulted by six intersecting groined vaults, but only their springing is preserved.[1]

For arches not in stone or concrete the use of flat bricks set edgeways, often in two rows one outside the other, is common, and these bricks are sometimes made in voussoir form thicker at one edge than at the one opposite. The alternation of bricks and stone voussoirs is common, and the stone used is often tufa which the Romans, and after them the Normans, favoured for use in arches and vaults on account of its lightness. As regards openings it may be noted that doors and windows are usually cut straight through the wall in orthodox classical fashion. The recessed openings which occur at the so-called imperial palace at Trier have not been noticed in England, but a remarkable example of an internally splayed Roman window occurs at Cilurnum (see Fig. 41, postea, p. 93).

Sufficient remains exist to show that the Roman cities of Britain were supplied with handsome columnar edifices. Among these, basilicas seem to be chiefly represented, the remains of Roman temples that can be identified being very scanty. Bases, portions of shafts, and capitals of columns that were as much as twenty to thirty feet in height have been found, as at Lincoln, Wroxeter, and Bath. The capitals are sometimes debased corinthian but generally of a modified Roman doric, in which is apparent a tendency to elaborate the classical annulus into a series of mouldings. The bases are attic. In two mediaeval churches near the Roman Wall in Northumbria Roman monolithic column-shafts are used in the nave arcades. The churches are Chollerton on the North Tyne and Lanchester in county Durham. There are in all six com-

[1] G. E. Fox, Uriconium, in *Archaeological Journal*, LIV, 147.

plete shafts, seven or eight feet in height and about five feet in girth, together with four others now half embedded in the walls to form responds. They are of sandstone, and are not brought to a finished surface, but are covered with tooling that seems partly Roman (Lanchester western respond) and partly mediaeval. One of them is shown in Fig. 156, postea, p. 259. The outline of the shafts is so irregular that repeated testing with the straight edge and measuring tape leaves it doubtful whether there was any intention of giving them the classical taper and entasis, though there are some indications of these.

One special class of columns calls for particular notice. These are small shafts some three or four feet high with attic bases and moulded caps that show distinct marks of having received their form by being turned in the lathe. This peculiarity is found in pieces of all sizes, and Mr. G. E. Fox states that 'in every Roman site in Britain where columns, or capitals, or bases are found, there is evidence of the lathe being used in forming them.'[1] Examples in the Leicester museum and at Chester exhibit this evidence very clearly. What these shafts were used for is not quite clear. There are plenty of roughly blocked pillar-like pieces on old Roman sites that formed the 'pilae' or supports of the upper floors of hypocausts, but the shafts in question are too finely wrought to be themselves pilae of this kind, though they often share with the hypocaust pillars a bellying form. Mr. Fox refers to them as 'dwarf columns the uses of which it is not easy to define,' and states that 'those of small size were certainly occasionally employed as the supports of stone tables,'[2] while 'others of larger dimensions, placed on a dwarf wall, upheld the roofs of peristyles in domestic buildings . . . possibly they may have served . . . as dividing shafts to large window openings in gables.'[3]

[1] *Archaeological Journal*, XLVI, 48.

[2] In the Museum at Mainz one may be seen so employed, while at Silchester evidence of the same use was found. See *Archaeologia*, LIII, 280.

[3] *Arch. Journ.* LIV, 170.

Two specimens of these shafts are given in Figs. 4 and 5. One is a little shaft 3 ft. 3 in. high, with cap and base of orthodox though debased form, that occurs, re-used, in the belfry opening of the Saxon tower at Wickham, Berks; the other, a roughly hewn stump, of about the same size, comes from Housesteads on the Northumbrian Wall.

Shafts similar to these are sometimes introduced on a small scale as ornaments on carved stones such as tombstones or altars. These details, though they may seem in themselves

FIG. 4.—Roman Shaft re-used in belfry stage of Saxon Church Tower, Wickham, Berks.

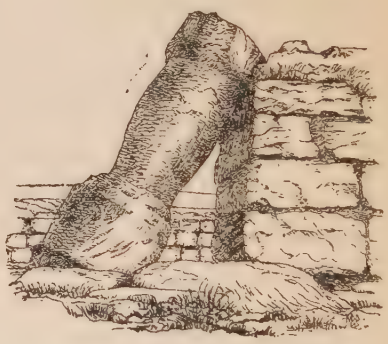


FIG. 5.—Roman dwarf Pillar at Housesteads on the Northumbrian Wall.

insignificant, become of importance in connection with the turned baluster shafts of stone which occur in Saxon work of apparently very early date, and their significance will appear as we proceed.

Mosaic pavements, the tesserae of which are formed of native stones or small testaceous cubes, are common especially in villas. The patterns of Roman mosaic pavements have a special interest in that they appear in some cases to have suggested motives which occur on sculptured stones and other forms of Old English ornamental art of Christian use and date. For the moment however we are only concerned with what

belongs to the domain of architecture, and the consideration of these patterns must be postponed.

The foregoing technical notes are from secular or at any-rate non-Christian structures. There is in this country one conspicuous instance of Roman construction applied to a Christian purpose in the frequently mentioned Early Christian basilican church excavated a few years ago at Silchester in Hants. Other fragments in existing early churches are claimed as

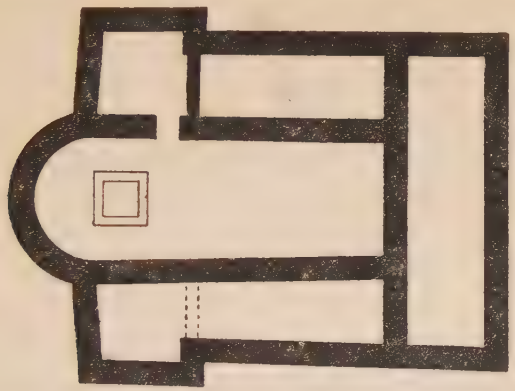


Fig. 6.—Plan of Early Christian Basilican Church in the Roman City at Silchester, Hants. Copied by permission from *Archaeologia*, LIII.

Roman but their attribution is a matter of uncertainty, whereas at Silchester the work is undoubtedly Roman, and the only debate that can be raised about it is whether or not it is Christian.

The situation of the structure in question in relation to the Roman city was shown in Vol. I, Fig. 19, p. 146. Fig. 6 gives its plan indicated by the lower courses of the walls, which were laid bare in the year 1892, when the writer had an opportunity of seeing them, but are now again covered in. Their material was flint rubble with brick quoins. The plan shows a narthex, a nave terminating in an apse, and side aisles ending in spaces marked off on either side of the apse, and projecting on the exterior beyond the line of the aisle walls. The building, the total exterior length of which was 42 ft., was oriented with its apse

towards the west. The floor was laid with a pavement of red tile tesserae about an inch square, but in the centre of the apse was a square space in which was a mosaic pattern the date of which, from a comparison with other Roman mosaics, is estimated in the report in *Archaeologia*[1] as the fourth century A.D. There was no trace of an altar or of any seat round the apse or at its central point. In spite of the absence of these, and of any distinctively Christian mark such as a cross or monogram, the building in its situation, plan, and orientation so exactly corresponds to what would be expected in a Christian church of the date indicated that it would be pedantic to doubt its Christian attribution. There are no definite Christian marks in the way of ornaments or symbols in the case of other early churches such as Reculver. They are known as churches by the continuous ecclesiastical tradition that attaches to them, but such a tradition could not exist at Silchester where the town passed out of existence before the middle ages began. The building in question may have had a wooden table-altar, which was the natural form at the period before relics came into fashion, and is the form indicated in the mosaic pictures of Christian altars of the middle of the fifth century in the Baptistry at Ravenna. The seats round the apse, if indeed there were space for any, may also have been of wood. The western orientation at Silchester suits an early period, as the priest would minister standing with the altar between himself and the people and in this position would face the east.

As bearing on the question of the Christian character of the Silchester structure, we may note that in the numerous Early Christian churches of North Africa the altars were also evidently of wood,[2] and no trace is now left of them save where the floor mosaic has preserved indications of the places where once they

[1] LIII, 563.

[2] Gsell, *Les Monuments antiques de l'Algérie*, Paris, 1901, II. 145.

stood. Thus at Sidi Mabrouk in Algeria there were mosaics all over the interior, but in the middle of the apse there was a rectangular space left plain, thus reversing the arrangement at Silchester.[1] Similarly, in the Early Christian church at Rusguniae in North Africa, of which an account is given in the *Bulletin Archéologique*,[2] while there is no trace of a permanent altar or of seats round the apse, the floor mosaic, of a far more elaborate kind than that at Silchester, exhibits in the centre of the apse, just where the altar would stand, a portion of a figure of a recumbent Lamb, and in front of it there is an inscription which runs across the chord of the arc and beginning with the letters ARA ends with the letters TERNO, the inscription in between being destroyed. Though there is no such Christian figure or lettering at Silchester, a fact of which the sceptic has made the most, a comparison of these three apses cannot fail to suggest that they had all the same destination.

This little Christian church at Silchester is properly described as Roman, and hence it is assumed that its prototypes would be found in Rome or in the other cities of the peninsula. It may be of advantage however to pause here a moment to consider what is the true meaning of this term 'Roman,' as applied to Early Christian monuments or institutions. Certain elements of the civilization which we call 'Roman,' and which we find pervading all the lands of the Empire, had in fact their origin and the source of their power in the actual city of the seven hills ; such elements were law, and the military and administrative system in general, but it must not be supposed that Rome herself was the fountain head of all the intellectual and religious movements which pulsated throughout that vast domain. Christianity, to take the most important of these, was not indigenous at Rome. In this case Rome was colonized by the adherents of a religion

[1] ibid, p. 259.

[2] Paris Comité des Travaux Historiques, etc., 1900, p. 126 f.

that had its original centres in the East, and Christianity radiated from these original centres over the Empire along lines that by no means necessarily passed through Rome. Hence the Christian forms and institutions, which are sometimes called 'Roman' because they are found all over the regions of the Empire, were in their birth and development independent of the city, and in dealing with them we must remember that Rome was only one out of many centres of Early Christian life.

It is to be noted that the Early Christian meeting-house appears in substantially the same forms over the whole of the lands of the Empire in its eastern as well as its western moiety. Whatever was the origin of the type of building known as the Christian basilica,[1] we meet it in the first age

[1] This is still doubtful, and the suggestion lately made by Dehio and von Bezold, which has been adopted in the new Anglo-American *Handbook of Christian Antiquities* (Macmillan, 1901), to the effect that the atrium of the Roman house gave its original form to the church, does not appear a very helpful one. The atrium, or central hall, of the house was just that part of it least likely to be used for the semi-secret gatherings of the Christians during the ages of persecution. It is true as the above writers point out that the alae of the Roman atrium might account for the Early Christian transept in the form in which we find it in so many of the basilicas of the city Rome, but then this is practically confined to the city Rome and is by no means a normal basilican feature, while on the other hand the apse, which is a normal feature and the most constant of all, has no prototype in the atrium. On this interesting and much discussed question the writer sees no reason to change the view which he put forward some years ago, to the effect that though meetings in private houses affected the surroundings and adjuncts of the Early Christian church, the peristyle of the house becoming the forecourt of the church, yet the special architectural form of the church is not to be sought in any part of the private house. We may imagine the small unobtrusive churches of the third century conforming to the type shown in the well-known Early Christian sarcophagus of the Lateran, where we find indicated a simple oblong interior terminated by an apse at the end opposite the entrance. This is a form suitable for what was known as a 'schola,' which means of course not a 'school' but a lodge-room or place of meeting of any brotherhood or company of people who have business to transact under the presidency of officials. Such a building would become a

of ecclesiastical architecture in a large number of different provinces, and find it everywhere essentially the same though with local modifications that are well worthy of attention. The chief provinces of the architectural type may be enumerated as (1) Central Syria, (2) Asia Minor, (3) Thrace, Macedonia, Greece, (4) Egypt, (5) North Africa, (6) Rome, (7) Italy in general, (8) Gaul, Spain, and Britain. The variations from one district to another are sometimes marked enough for us to speak of distinct local schools, but as a rule they are too slight for this to be possible. An extensive enumeration of examples in the different regions, with indications of their peculiarities, is to be found in the article 'Basilica' in Kraus's Encyclopedia,[1] and one particular set of variations, those that distinguish the basilicas of the North African province from the basilicas of Rome, has lately been discussed by M. Gsell in his valuable work on Algerian monuments.[2]

Some of the variations concern the presence or absence of an atrium or columned court before the church, which is common in Syria, in Rome, and in Gaul, but is hardly known in North Africa; or of a narthex or long vestibule across the entrance end, which is not an Italian fashion but

basilica of the normal shape if the side walls were broken through and rows of columns substituted to give access to aisles. This very process went on in most of our English parish churches where aisles have been added in similar fashion, and the same thing may well have been done much earlier. On this hypothesis we readily account for the principal features of the church, including the apse, and we also account for the fact that the normal Early Christian basilica has no galleries over the side-aisles, though this was so common a feature in the pagan basilicas of the Roman cities. When once the side-aisles were introduced they became universal even in buildings small enough, like Silchester, to be roofed in one span, and the reason probably is that the tripartite division of the interior was convenient for separating the different sections of the congregation.

[1] *Real-Encyklopädie der christlichen Alterthümer.*

[2] *Les Monuments antiques de l'Algérie.* M. Gsell notices no fewer than a hundred and thirty-eight Early Christian churches of which remains are to be found in the district, and he notes that they show very little variation one from the other in plan and arrangement.

is common in the East and in northern Africa. The altar end of the building is variously treated. The church is sometimes spread out at the end where the services are performed in order to accommodate a larger body of ministrants or give facilities for ecclesiastical display. Rome has here a speciality in the transept, which appears in many of the basilicas of the city, but is not found elsewhere till it reappears a little later in some of the early mediaeval churches of Gaul. Subsidiary spaces for the purposes of a sacristy are variously arranged in different examples and in different groups, and M. Gsell specially notes that the flanking chambers on either side of the apse called 'Prothesis'[1] and 'Diaconicon' are rare in Italy[2] but in North Africa almost universal.

It is somewhat remarkable that in several of the points in which Italian basilicas differ from those of North Africa and the East, Silchester agrees distinctly with the latter and not with the former. Its type is not Roman or Italian but rather North African or oriental. At Silchester there is a distinct narthex quite on an oriental plan, while the apse is flanked by two chambers of which that on the north appears to open into the presbytery and so to correspond to the diaconicon or service-chamber universal in North Africa and the East, while the corresponding chamber to the south may answer to the prothesis, which in the regions just mentioned opens towards the church rather than the presbytery. The floor at Silchester was all on one level while in the African churches the presbytery is

[1] So called as the place where people deposited, or 'put forward,' oblations.

[2] The best examples here are the early basilica of Sta. Sinforosa outside Rome, and San Spirito, Ravenna. San Giovanni a Porta Latina at Rome might also be claimed as an Italian example, but the walls which here divide nave and aisles at the altar end date only from the seventeenth century. The spaces at the ends of the aisles are only chapels, and the sacristy is in another part altogether. See Crescimbeni, *Istoria della chiesa di S. Giov. av. Port. Lat.* Roma, 1716, p. 86.

generally raised, and this constitutes a difference which does not however nullify the remarkable resemblances here noticed. These seem to bear out in a striking manner what was said in the previous volume about the probability that the Christianity of Gaul and Britain was at first independent of Rome, and in touch rather with the East, and it will be remembered in this connection that the language in the chief centres of the Gallic church in the second century was Greek and not Latin. It is

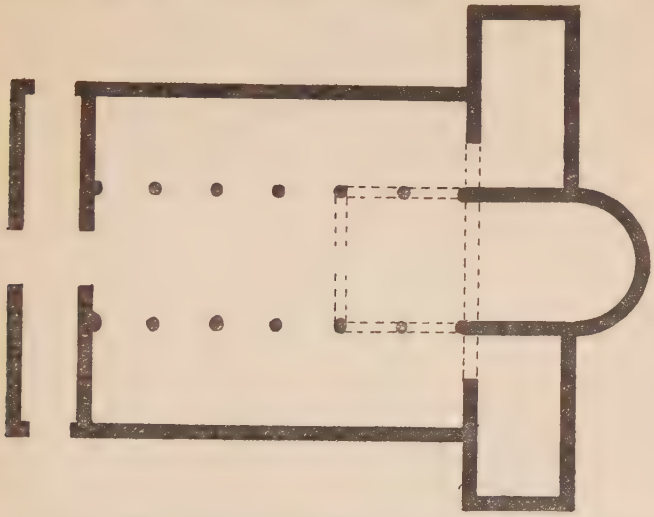


Fig. 7.—Plan of Early Christian Church at Guesseria, North Africa. From Gsell, *Les Monuments Antiques de l'Algérie*. (No scale.)

probable therefore that the little church at Silchester was affiliated to this partly oriental Gallic church, which shared its eastern connections with that of northern Africa. The accompanying plan, Fig. 7, taken from the work of M. Gsell, presents as near a parallel to Silchester as could well be found. It is of similar proportions but just double the size, and like the African churches in general has the apse towards the east. The narthex is present in both, while the extension of the lateral chambers on each side of the apse beyond the line of the aisle walls is another striking point

of similarity. This extension may seem at first sight like a transept but it is essentially different, as the side spaces are here subsidiary and do not, like the transept, form an integral portion of the open interior of the building.

II. The Celtic Sources.

Early Christian architecture in the non-Romanized parts of Great Britain and in Ireland is represented by numerous extant monuments, that offer a series of successive types affiliated on pagan structures and ending with Christian churches of simple but matured form such as are found in other parts of Christendom. Among the Celtic districts of these islands, Cornwall and Wales, the Christianity of which goes back without break of continuity to Romano-British times, offer disappointingly few well-preserved architectural remains of early date. Scotland is in this respect far richer, and the existing monuments of the class under consideration have been fully illustrated, partly from the notes of earlier investigators, in the recently published work by Messrs. M'Gibbon and Ross.[1] The Celtic work in question is however best represented in Ireland, the Early Christian art of which, through the medium of Iona, largely influenced that of the neighbouring Caledonia. For the practical purpose of this chapter it will be sufficient to draw examples from the comparatively well preserved structures of Ireland, it being understood that work of the same kind though more fragmentary occurs in all the other Celtic regions above enumerated.

The early types met with in these regions appear in their main features to be of purely native origin. Neither in their form nor their general technique do we discern any copying of foreign models, until in the later examples the use of lime-mortar and the arched window heads and chancel arches betoken a borrowing from Roman traditions. The series of types may be briefly described as follows.

[1] *The Ecclesiastical Architecture of Scotland*, Edinburgh, 1896-7.

It begins with the circular so-called 'bee-hive' cell of dry, that is uncemented, stonework. Such a structure can be seen in the drawing of Skellig Michael given in the previous volume.[1] It is there employed for Christian purposes, but the form can be followed far back into pagan times. Among the most imposing of Irish monuments are certain great sepulchral tumuli beside the river Boyne, at Newgrange and at Dowth, recognized as burial places of ancient Irish kings, and belonging undoubtedly to the pre-Christian period. Access to the interiors of these immense mounds is gained by passages lined and roofed with huge upright and horizontal slabs of unhewn stone, and these end in chambers, circular in plan, and in section resembling a bee-hive, wholly constructed of unworked stones put together without cement and forming domical vaults by the system known as encorbelment. The structures forcibly remind the traveller of the tombs or so-called treasuries at Mycenae and other sites in Greece. At the 'tomb of Atreus' at Mycenae there is the same tumulus of earth with a domed sepulchral chamber of stone in the heart of it, the stones being all laid flat but each ring being a little smaller than the one below it, so that the structure gradually grows to a point as it rises. In Greece the stones are carefully cut to shape and their lower edges which overhang have been chiselled away so that the concave surface is everywhere smooth. In Ireland the stones are rough but of vast size, and the primaeval greatness in the effect of the monuments lends them a majesty which the more finished classical examples cannot surpass.

Chambers or cells of this same bee-hive shape but of lesser size and constructed of smaller pieces, such as would be picked up on stony sites, occur in the open in many districts of Ireland and on the western sea-board of Britain generally. Many no doubt have once been covered by mounds of earth and served a sepulchral purpose, but others were certainly dwellings and must have been open from the first. They

[1] Vol. I, p. 152.

are frequently found within the areas of the great stone forts that are such remarkable features of the west of Ireland and of Wales. These forts are often of a most imposing character that is largely helped by the nature of their surroundings. That known as Dun Ængus, on the largest of the Aran islands in Galway Bay, of enormous strength, is on the very edge of a sheer cliff washed three hundred feet below by the Atlantic waves. The Irish appellation for these forts is 'cashel,' a word borrowed from the Latin 'castrum,' 'castellum,' and they come into the story of Christian architecture because their deserted precincts were sometimes occupied, like Roman enclosures in England, by Early Christian monastic communities.

Fig. 8.—Doorway in an old Irish fort.

The dry-stone ramparts which are of immense thickness, as well as the circular walls of the bee-hive cells, are pierced by doorways the construction of which is of interest for our theme. In the example illustrated in Fig. 8 the jambs of the doorway are composed of huge upright stones like those in the passages of the tumuli, and the lintel of a horizontal stone, above which in other examples we sometimes find another in order to relieve the first from pressure. One notable peculiarity of such doors is the fact that for the purpose of reducing the obligatory length of the lintel-stones the jambs of the doorway are made to converge, so that the aperture is smaller above than below. This feature occurs also in the monumental doorways to the Mycenaean tombs.

It happened more than once that the interior of a stone fort or cashel of this kind was taken possession of by a Christian community. Of this we have literary as well as

monumental evidence. A well-known example is Innismurray, off the coast of Sligo, where an enceinte, almost certainly of a non-Christian origin, encloses Christian buildings of an early type. Among these are some bee-hive cells exactly like those already referred to, but these might conceivably be survivals from a pre-Christian time when the place was a secular fort. On Skellig Michael on the other hand (see the illustrations, vol. 1, pages 152 and 198) the structures are, one and all, certainly Christian. The massive wall of enclosure forms a Christian cashel, and is constructed just like the pagan stone forts, while some of the bee-hive cells are stamped as Christian by a cross formed by white quartz stones over the doorway. These however show a divergence from the simpler form hitherto discussed in the fact that, though circular externally, they are rectangular, with sharp or rounded corners, in the interior.

These Christian bee-hive cells on Skellig Michael were dwellings not chapels, as is shown by the fact that there are openings in the roof for the egress of smoke, but there is some reason to think that the circular form may have been used for oratories. In a passage already referred to about the primitive Irish monastery (vol. 1, page 197) we have the dimensions given of certain ecclesiastical structures which are ascribed to St. Patrick himself. As only one dimension is in each case given, it has been argued that the buildings were round, so that the diameter gave the size. If this do not seem quite convincing, we have the further significant fact that we are told several times of 'ecclesiae quadratae,' and this adjective would hardly have been used had not the round form been at the time familiar. If the round oratory were known in the earliest Irish period, it is conceivable that it would develop into the normal rectangular form after the manner indicated in these transitional cells on Skellig Michael.

The development was inevitable for the reason that an

interior round in plan cannot be oriented and offers no natural place for the necessary altar. Orientation, though the Church of the earliest times generally and the Church at Rome throughout was indifferent to it, was made much of in later days by universal Christendom. The disadvantage from this point of view of the round or polygonal interior was felt on the Continent, in connection with monumental buildings of the type of San Vitale at Ravenna or San Lorenzo at Milan. These have been oriented in a somewhat forced fashion by building out a special altar-house or in some way emphasizing one diameter of the circle; but the contradiction between the architectural character of the building and the Christian scheme of arrangement for an interior is still apparent.

The Irish, who in common with the Christians of the other parts of these islands seem to have made a special point of orientation, would be met by the same difficulty when they tried to use the traditional circular plan for purposes of Christian worship. The cells on Skellig Michael at any rate exhibit certain stages in the transition from the round to the rectangular form that are interesting to trace. The largest of the cells of the first character on the rock is oblong not round in external plan, and possesses a window as well as a door, so that it may conceivably have been an oratory, in which case the cross marked with white quartz stones over its portal would have a special significance. This may give us an existing example of a type prior to the evolution of the ecclesia quadrata. The latter is represented at Skellig Michael in a very primitive-looking and interesting monument. This is a small rectangular oratory, oriented considerably north of east, that stands somewhat apart from the other structures just above a projecting corner of the cashel wall and on the edge of an almost precipitous descent to the sea. Its general form is shown in Fig. 9. It measures only about 8 ft. in internal length and is entirely constructed of slab-like

Fig. 9.—Small square Oratory of dry stone-work on Skellig Michael, off Kerry, Ireland.

(To face p. 22.)

pieces of slate, untouched by the tool. These are placed from the ground upwards in the system of encorbelment, so that all the sides (except on the end where the door comes) converge from the first, and the whole looks like a truncated pyramid with convex sides on a rectangular base. The door has a flat lintel and sloping jambs that are not formed however of single upright stones but are built up like the rest of the walling. The external ledge on the south side is hardly part of the structure, but was evidently arranged to furnish a warm and sheltered seat on this retired spot for the lonely and meditative votary.

A larger building of this type, near Kilmalkedar on the mainland of Kerry, shows an east window which has the peculiarity that it is splayed both outside and in, the central aperture being only 6 in. wide, and is surmounted by a flat lintel, while beneath it are the remains of the ancient stone altar. The roof was composed in the same fashion by encorbelment, but it has given way in the upper part. Perfectly preserved on the other hand, with the exception of the coping, is the famous oratory called 'Gallerus' on the Dingle promontory of county Kerry—one of the most interesting little buildings in Europe. 'Gallerus'—the meaning of the name is not known—is constructed with extreme care and skill, and has preserved its walls and stone roof intact for, perhaps, 1200 years. The form is the same as that of the oratory on the Skellig (Fig. 9); but the stones in the interior have been, to some extent, smoothed by the hammer, and they lie so closely together that the surfaces of contact have probably been treated in the same way. This refinement, together with the fact that the window, in this case only splayed internally, is arched, shows that the example is an advanced one of its type. Fig. 10 gives the aspect of this interior masonry in the south-east corner. No cement of any sort has been used, and it is easy to see daylight through the crevices between

the stones of the walling. These crevices do not however let in moisture, for the stones are bedded with a slight downward slope towards the exterior, so as to throw off the rain.

Fig. 10.—Interior of the small dry-stone oratory, 'Gallerus.'

This slope has also a constructional value in counteracting the tendency of the stones, as they overlap on the interior, to topple inwards.

The construction of stone roofs by this process of encorbelment does not concern us in this place for it has only the very slightest bearing on the subject of Saxon architecture, but it may be noted that the next stage in constructional development brings us to buildings like that shown in Fig. 11. Whereas at Gallerus the slope of the vault begins practically from the ground level, in the example on St. Macdara's island there is an upright wall on all four sides, that is kept low on the flanks so as to throw the greater part of the height of the building into the roof, but continued on the gable ends to the full elevation. These gables, it will be discerned, are acutely pointed and this is due to the mode of construction of the roof, for it is obvious

that the steeper the slope the more stable will be the vault in encorbelment. The method of roofing gave rise also to very

Fig. 11.—Oratory on St. Macdara's Island, off Connemara, Ireland.

curious features in Irish buildings of this class, that at first sight have a somewhat classical appearance (Fig. 12). These are upright pilaster-like projections that appear to east and west at the corners of the building, as if they were extensions of the side walls beyond those of the gables. The visitor to Ireland who first sees these thinks of Roman work, but they are purely native, and are clearly connected with the system of roofing already noticed. This becomes evident in those examples where the projections are not confined to the vertical walls, but extend up the

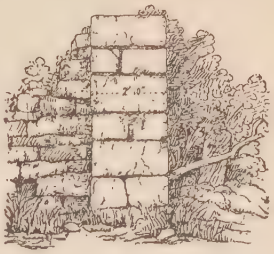


Fig. 12.—Pilaster at the south-west corner of ancient Church at Dulane, near Kells, Ireland.

gables to their apex, presenting the curious appearance shown in the St. Macdara Oratory.

A further development of this characteristic Irish system of construction brings us to the churches with double stone roofs, in which the outer covering is a vault in encorbelment of the type already shown, but this is supported beneath, or at any rate the interior of the church is covered

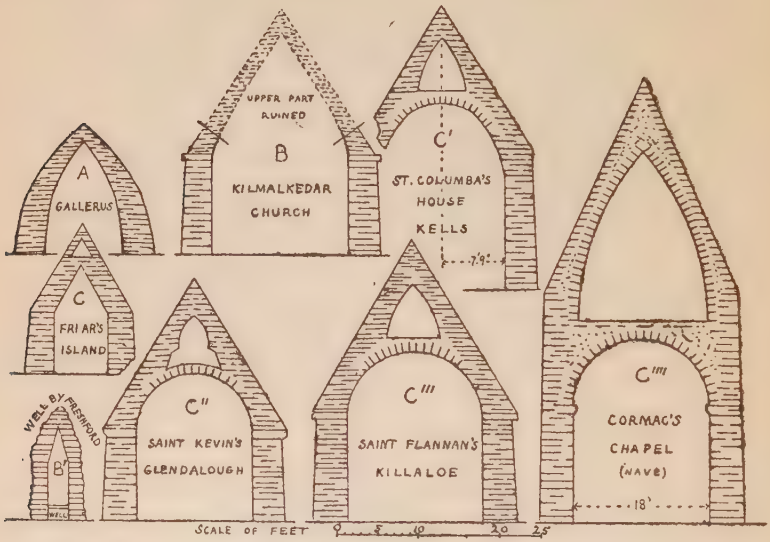


FIG. 13.—Sections of Irish buildings with double stone roofs, from about the seventh to the twelfth centuries.

below, by an ordinary barrel vault of round or elliptical section. Fig. 13 shows some sections of the principal Irish monuments of this particular character. They are in three groups lettered A, B, and C. In the type A there are no vertical walls and the slope of the vault begins practically from the ground. In B there are low vertical walls and a single stone vault in encorbelment surmounting them. In the examples marked C the roof is double, there being a lower vault with a space forming a chamber over it.[1]

[1] The statics of these interesting structures were briefly discussed by the writer in *The Builder* for October, 1897.

This system is carried on into the twelfth and thirteenth centuries, and the classical example of it is Cormac's chapel on the Rock of Cashel, a structure in the Norman style. With this after development however we have here no concern.

The structures in question offer problems of some interest to the student of the statics of building. Though in most cases there has been a certain amount of restoration in recent times, these vaults, both upper and under, seem to have remained firm, and have not been reconstructed, while in no case has any buttressing of the external walls become a necessity. This fact reflects no little credit on the ancient Irish mason, who not only evolved a novel scheme of construction but carried it out with perfect success into practice.

Our concern at the moment is rather with planning than construction. All the buildings previously noted have been single-celled oratories, but there exist in almost all parts of Ireland churches that possess not only the main rectangular chamber, but a smaller chamber to the east of it, also rectangular and forming what we should term a chancel. These nave and chancel churches form a large class of buildings represented in most parts of Ireland, that show a distinct architectural advance, though it does not follow that in individual cases single-celled oratories may not be later than churches with chancels. There are instances in which a single-celled oratory has been enlarged by the subsequent addition of a chancel, but in the majority of cases nave and chancel are contemporaneous, and we may take this to be normal. The buildings in question are plain structures, with a nave generally entered through a west door, and lighted by primitive window-slits with a square or triangular head, or a round one cut out of one or perhaps two stones. An archway leads into the small, square-ended chancel, that has usually an east window and one other, of the same kind as those in the nave. The old stone altar sometimes remains, and this is a feature in which Irish country churches have an advantage over our own. Ground plans of two

characteristic examples are given in Fig. 14, Killiney old church, near Dublin, and the so-called 'Trinity' church at Glendalough, county Wicklow. Both are roofless and in ruins.

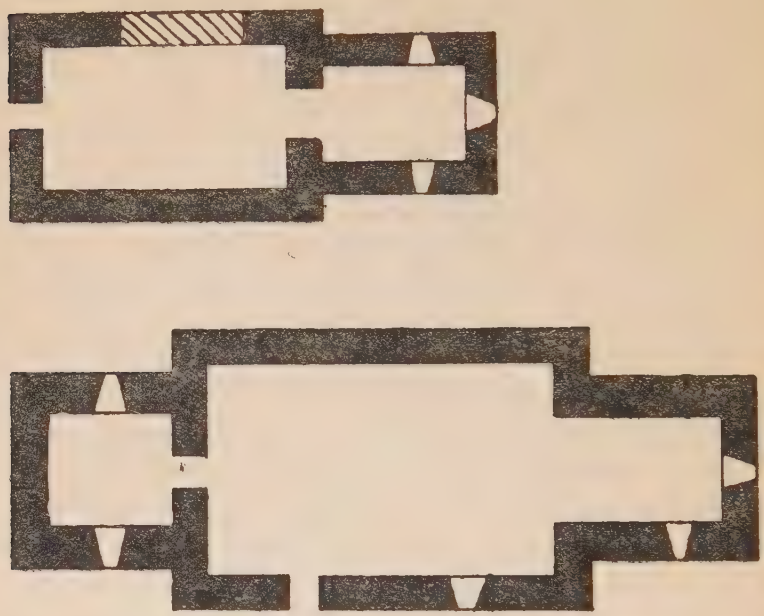


Fig. 14.—Plans of Killiney Old Church near Dublin, and 'Trinity' Church, Glendalough.

The latter building has at the western end an adjunct, later in date than the main structure, that has no external doorway and cannot therefore have served as a porch. As a rule the churches of this class have no projecting porch or other adjunct. An interior view of the Glendalough example is given in Fig. 15, and it will be seen there that it has a chancel arch of mature construction the full width of the chancel. It is to be noted indeed about all the churches of this class that the chancel arch is comparatively wide in relation to the plan as a whole. The most notable difference in technique, between these nave and chancel churches and the more primitive ones already noticed, is that the former are built with mortar, and

were sometimes plastered. The material is wrought stone, but this varies from coarse rubble to finely cut ashlar. The construction is sometimes of large granite blocks very carefully fitted, and has a fine megalithic character. No special treatment of the quoins is to be observed. On the other hand there are about these more advanced structures distinct reminiscences of the older traditions. As regards construction, some examples even in the twelfth century[1] had

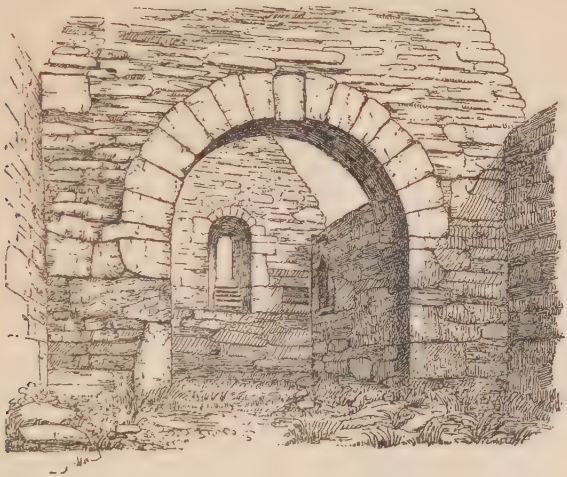


Fig. 15.—Interior view of 'Trinity' Church, Glendalough.

stone roofs single or double such as have been described. In most cases however the roof was of wood of the ordinary kind, though even here the influence of the primitive technique is still to be observed in the facts that the side walls are generally low while the gables are acutely pointed. The pilasters on the gable ends at times also survive as in the so-called 'cathedral' at Glendalough, a building that measures 30 ft. in internal width and can never have had a roof of stone.

In connection with this question of width it might have been expected that the old tradition of stone roofing would have

[1] Kilmalkedar church, Fig. 13, B (not the earlier oratory mentioned on page 23), and Cormac's chapel, Fig. 13, C''''.

resulted in a tendency to contract internal breadth. We have seen that it led to low walls and steep gables. Why did it not also result in long and narrow interiors which would have facilitated stone vaulting? As a fact both the single-celled interiors and the naves of the more advanced structures are as a rule by no means of specially narrow proportions. It is just possible that the influence of the original derivation from the round form may have been here at work and have kept the two dimensions of the rectangle near each other. There is however one building, not in Ireland but possibly erected under Irish influence, that is curiously elongated in plan. This is that single-celled chapel on the west coast of Lancashire at Heysham on Morecombe Bay, dedicated to St. Patrick and possibly representing an Irish mission station on this accessible coast, of which a plan was given in vol. I, p. 312. To this structure and to the elongated plan which it represents we must return on a subsequent page. Its Irish origin is too doubtful for it to be discussed in this place.

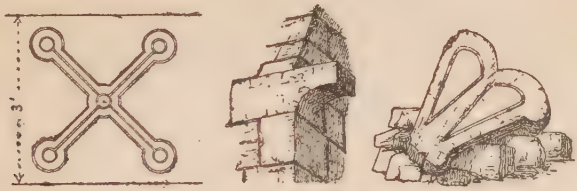
Fig. 16.—Western doorway to the Church of Our Lady, Glendalough.

In matters of detail we find in these more advanced Irish buildings sundry distinct traces of survival. These are apparent in the doorways, which in their most characteristic form are flat-headed and austerely plain. Fig. 16 shows a good example. The position of the doorways is almost always at the western end, and in this again we see a survival of primitive tradition. The southern doorway occurs but very rarely. Lord Dunraven stated that he only knew of three examples.[1]

[1] *Notes on Irish Architecture*, Lond. 1875 etc., vol. II, 26.

The windows whether arched, flat-linteled, or covered with a triangular head, are internally splayed. The double splay of the eastern light at Kilmalkedar is quite exceptional. Ornamental details are practically non-existent, and this plainness of the early buildings of a people who excelled in the same epoch in the decorative arts is not a little curious.

The accompanying illustration, Fig. 17, shows an incised cross (*a*) that occurs on the soffit of the lintel of the door-way in Fig. 16, together with a characteristic detail (*b*) in the form of a projecting stone like a corbel which occurs sometimes



a *b* *c*

Fig. 17.—Ornamental details from old Irish buildings.

at the base of the gable of churches of the kind and has been termed a 'handle stone,' and (*c*) a specially Irish finial.

In the nave and chancel church we have arrived at a normal type of church plan such as can be paralleled in many parts of the Continent, and at forms and processes, such as the use of the arch and plastering, that are undoubtedly of foreign origin. The general scheme of the two chambers, though found outside Ireland, may at the same time be in Ireland of purely native origin. If the single rectangular chambers were adopted for the sake of securing a suitable position for the altar, the addition of a second smaller chamber of similar form may be due merely to the desire to emphasize still further its sacredness. There is no need to assume a continental derivation for so simple a scheme.

There is no object in following any further the development of Irish ecclesiastical architecture, for the next stage is marked

by the introduction of carved ornament of considerable richness in the style known as Irish Romanesque. This work, in which a strong Norman influence mingles with native decorative feeling, dates not earlier than about 1100, by which time the Saxon architecture with which we are at present dealing had passed away. At the earlier work it has been necessary to glance, because the question of its relation to that of Saxon England must necessarily occupy our attention in the sequel.

CHAPTER II

FOREIGN INFLUENCES ON LATER SAXON ARCHITECTURE

We have now glanced at the forms and methods employed in building by the Romans and by the non-Romanized Celtic peoples, and have studied at Silchester and in Ireland some of the Early Christian structures in which these forms and methods are illustrated. The churches erected in England subsequent to the Christianizing of the invaders would be expected to show considerable traces of the influence of these pre-existing traditions, and this influence would naturally be strongest at the beginning, when the Teutonic converts were for the first time essaying the novel art of church construction in brick or stone.

A caution given in the last chapter may usefully here be repeated. It must be clearly understood that in the use of the word 'Roman' no direct importation from the city Rome or even from Italy is asserted or implied. By Roman forms are meant the forms in use all over the Roman Empire, in Gaul and North Africa as well as in the Italian peninsula. There has been a general tendency in discussion upon early Saxon forms to turn at once to Italy for prototypes, but the reader will be asked to agree that as a fact there is very little need to bring Italy into the argument. We can find what we want in the way of prototypes much nearer home. The form of Wilfrid's crypts, for example, has been

connected with that of the 'cubicula' of the Roman Catacombs, but the truth is that such barrel-vaulted chambers are common enough in Gaul and Germany, where we find them of various ages, from the early examples, probably of the sixth century, that have been lately excavated in the cemetery of St. Matthias at Trier. Many of the French and German churches of old foundation, such as St. Savinien at Sens, St. Louand by Chinon, Werden a.d. Ruhr in Rhenish Prussia, possess such chambers as a part of their crypts. What there is really Roman in early Saxon work can easily have been derived either from the classical monuments of our own country or else from the more numerous Roman monuments of Gaul.

A Saxon architectural style may have been in this way originally formed upon Roman and Celtic models. The style however possesses a history of some length, and in the four hundred and fifty years which this embraces it would be natural to expect both internal changes and developments and the importation of new elements from other lands.

Records of church building occur throughout the Anglo-Saxon period. After the first great missionary age was over, we read of events like the rebuilding in the eighth century of the church at York,[1] with its thirty altars, that must, one would think, have given an impetus to church extension all over the North. Subsequent to this came the Danish desolation, but even after the inroads had begun we hear of local activity in church architecture on the part of bishops such as Swithun of Winchester, who died in 862 A.D.[2] The close of the next century witnessed a widely-diffused revival encouraged by king Edgar and carried out under Dunstan, Æthelwold, and Oswald. Cnut, at the beginning of the eleventh century,[3]

[1] The description is given in a poem attributed to the famous Alcuin and printed in *Historians of the Church of York*, Rolls Series, No. 71/1, p. 394.

[2] W. of Malmesbury, *Gesta Pontificum*, Rolls Series, No. 52, p. 161.

[3] W. of Malms. *Gesta Regum*, ad ann. 1017.

built and rebuilt numerous churches and monasteries, and in the middle years of it one of the laws ascribed to Edward the Confessor refers to the fact that there were then three or four times as many churches as in the early days, in terms which seem to imply that church building was a feature of the age just prior to the Conquest.[1]

We can obtain a convenient division of the time from the conversion of Æthelberht to the Norman Conquest by making an early period end with the first inroad of the Danes and the ravage of Northumbria, a middle period cover the epoch of the Danish wars, and a late one begin with the reign of Edgar. These three periods would correspond roughly to the years 600–800, 800–950, 950–1066.

Any attempt to distribute the general body of the existing Saxon monuments among these periods must be deferred till the monuments themselves have been passed in review, but a notice of the foreign influences which are most likely to have been operative at each epoch will suitably here find a place. The object is not to pre-judge at the outset any of the debated questions of origin in Saxon architecture, but merely to indicate the conclusions to which the writer has been brought, in order that the reader may have these in mind as hypotheses during the study of the monuments themselves in the chapters that follow.

Of the three building epochs just indicated there is no doubt that the two really prolific ones were the first and the last, for the central or Danish period though not a wholly barren epoch certainly cannot have been one of great productiveness. It is possible nevertheless that new elements were then introduced which had an effect on the architecture of the succeeding era when church building was again in vogue.

In the first epoch, as we have already seen, there was a mixture of Roman and Celtic influences modified, but only slightly if at all, by native Teutonic traditions. In

[1] Thorpe, *Ancient Laws*, etc., p. 191.

the second epoch, that of the Viking invasions, we might anticipate a Scandinavian influence, but it is a question whether we can point to any architectural feature for which such a derivation can reasonably be claimed. In decorative art, in wood-work both of buildings and of ships, and in the sphere of manners and customs, the influence of the Northmen may be detected or at any rate discussed. The Vikings were in no case however stone builders, and cannot have imported any new features ready-made into the practice of the architectural art in stone, in which they had no native traditions. Any influence they exercised would be indirect and might take two forms. First, the new social conditions produced in England by the Danish invasions might lead to the modification of building fashions and the evolution of special forms. This was certainly the case in Ireland, where there seems now no question that the famous round towers were towers of refuge necessitated by the dangers to which monastic communities were exposed in the days of Viking ravage, and it has been suggested that the pre-Conquest church towers so common in the north eastern districts of England may have been due to a similar cause. Second, the Vikings, though not themselves stone builders, may have familiarized England with timber forms which were afterwards introduced into later Saxon stone architecture.

The question of the influence of timber work on Saxon architecture has already come before us. There are those, the late J. T. Irvine was one, who have attached great importance to this influence and have used it to explain not a few of the features of pre-Conquest building. The examples however to which they appeal are not the earlier structures, such as St. Martin, Canterbury ; Brixworth, or Escomb in Durham, but those that are acknowledged to be of comparatively late date such as the towers of Earls Barton and Barnack, Northamptonshire. These towers exhibit the narrow projecting vertical strips of stone work which at first sight seem closely to

resemble the uprights of the half-timber framed buildings that were noticed in the opening chapter of the first volume. The buildings which show these vertical strips are of the Danish or the later epoch, and it is conceivable that the Danish settlers in our eastern counties may have so stimulated the timber architecture of the old country that it gave birth to these somewhat remarkable features of later Saxon stone buildings.

This will accordingly be a convenient place in which to inquire what were the probable forms of the timber work employed alike by the original Saxon settlers, the Celtic missioners, and the later intruders from the Scandinavian North. It is unlikely that there would be marked differences among these. The expression 'mos Scottorum' is used more than once[1] for the wood building of the Irish, but this need not imply that there was any special kind of construction in wood peculiar to the Celtic tribes; we have no ground for assuming that the early Teutonic conquerors of Britain brought with them any particular technique different from those practised by timber constructors all over the world, nor that the methods in woodwork of the Danes or Norwegians of the ninth century represented any marked technical advance on the those of the Jutes or Frisians of the fifth. There are essentially three forms of wood technique, represented respectively by the wattled hut, the block house, and the structure of framed timber work. The first is merely an application to building purposes of the very primitive processes of mat or basket weaving, one of the very earliest of the crafts, and cannot in its very nature attain to monumental dignity. The two last rise to the rank of architectural processes. There is this difference between the block house technique and that which employs the frame and filling. The former is simpler and more natural and is used where the material is abundant, whereas the latter is scientific and effects a saving in material. In the block house method the tree trunks or squared logs are placed close together either in a

[1] *e.g.* Bede, *Historia Ecclesiastica*, III, 25.

vertical or a horizontal position and form a compact wall like that of a Swiss hay chalet or Canadian backwoodsman's hut. In the framed system the beams are disposed at intervals, and some commoner and less resisting material is used to fill in the spaces between them.

It is of course this latter style of work that is claimed as having originated those features of Saxon stone architecture just referred to. It was so familiar in our own country in later mediaeval times that its existence at remoter epochs has been assumed as a matter of course. It is however contended here that this assumption is not justified, and that pre-Conquest timber work was more probably in the compact block house style. The available arguments on both sides may be thus summarized. Framed timber work was familiar to the Romans, who had to work in highly civilized lands where wood was no longer abundant. There is evidence that they used it in our own country at Silchester[1] and elsewhere. Again, we must admit a knowledge of the principles of framed timber work on the part alike of the early Saxons and Angles and of the later Vikings, for the art of ship-building that they practised in their continental homes cannot be carried far without the introduction of the ribs and planking, which in their mutual relations are not unlike the frame and filling of the half-timber house. M. Ruprich-Robert indeed, in his work on Norman architecture, offers a suggestion (which he does not follow out) about the possible influence of the tradition of ship-building among the northern sea-rovers on the timber-work of the roofs of the later Norman churches.[2] The ship had however necessarily to combine lightness with strength, an end secured by nailing comparatively thin planks over a framework of strong pieces disposed at intervals. Were a house built like a ship it would have the uprights inside, and the planks would present a uniform outer surface like that of the modern hoarding, but very unlike that of the half-timber dwelling. Ship-

[1] *Archaeologia*, LVI, 243 f. [2] *L'architecture Normande*, Paris, 1884, ch. VII.

building technique, in other words, would not naturally lead to the framed timber work of the mediaeval house. In the continental homes however both of Teuton and of Norseman, and in the England where they settled, timber was at first so plentiful that they would not trouble to do more than cut the number of logs required and fit them together in the simple and solid block house fashion. It is in the highest degree improbable that they would adopt the economical methods of later mediaeval times, when wood was becoming scarcer, and would space their uprights at wide distances apart, using wattle-and-clay or similar materials for the filling-in. Yet, if we suppose the pilaster strips of eleventh-century Saxon stone churches to be imitations of timber-work, we should have to assume that this advanced mediaeval technique was already in vogue at least as early as the tenth.

It is natural to refer in this connection to the well-known timber churches of Norway, on which Professor Dietrichson has published an instructive monograph.[1] These Norwegian structures, highly interesting though they may be, are not exactly of a primitive character. They are basilican in plan, were very often apsidal, and in such features as round-arched arcading or cubical capitals, exhibit a direct imitation in wood of Romanesque stone forms, while no earlier date than the eleventh century is claimed for any existing example. They are in fact in many of their features rather copies of stone buildings than their prototypes. The attempt made by Ruprich-Robert to derive from this source some of the Norman architectural forms has met with no acceptance.[2]

The construction of the Norwegian wooden churches is advanced, and depends, as Professor Dietrichson has shown, essentially on the principle of frame and filling. To argue from these to the English structures of more primitive times would be extremely hazardous. The writer last quoted tries to prove a connection between the Norwegian structures and

[1] *De Norske Stavkirker*, Christiania, 1892. [2] *L'architecture Normande*, loc. cit.

the one example of a Saxon wooden building that still remains to us, the nave of the church at Greenstead in Essex, already more than once referred to in these pages.[1] What now does Greenstead offer to us?

The church, which is a mile or so from Chipping Ongar just beyond the bounds of Epping forest, consists now in a modern chancel of normal type, a nave measuring internally 26 ft. by 17 ft. and a western tower. The last is coated with wooden planks and is comparatively modern, the nave is the Saxon fabric and the walls of it are composed of upright balks of timber, made of trunks of oak trees split down the middle, stripped of their bark, and smoothed with the adze on their flat faces. They are placed closely side by side with the flat faces inwards and the half rounds showing on the exterior. The joints between them are covered internally with modern strips about two inches wide. The general aspect of these wooden walls may be judged from the view of the north-west corner given in Fig. 18. What is seen now is a reconstruction. Originally the split trunks were let into a sill of oak at the bottom and fastened at the top with wooden pins to a horizontal plate, but the lower parts of the fabric had become rotten through the ground damp, and in the year 1848 it was taken to pieces and the uprights laid out on the ground for examination. The lower portions of them were then cut off and they were remounted as they stand at present on an oaken sill upon a low wall of brick.

[1] Vol. I, p. 26, 37. In connection with Greenstead reference must be made to a document associated with St. Edmundsbury, that is given in Dugdale's *Monasticon*, III, 139. It is there stated that in the year 1013 the body of St. Edmund was conveyed from London to Suffolk and rested for a night near Aungre (Ongar) where a chapel was constructed of timber for its reception. Apud Aungre hospitabatur ubi in ejus memoria lignea capella permanet usque hodie. There can be little question that this is the very structure that has come down to us.

The technique here is the simplest possible. The walls are simply strong palisades. The sill and the plate are mere adjuncts for fixing purposes and are essentially posterior, not prior, to the uprights that represent the main structure. There is no sign of that skeleton which in framed work is essentially prior to the filling and of heavier section. It is necessary to insist on this as Professor Dietrichson is inclined

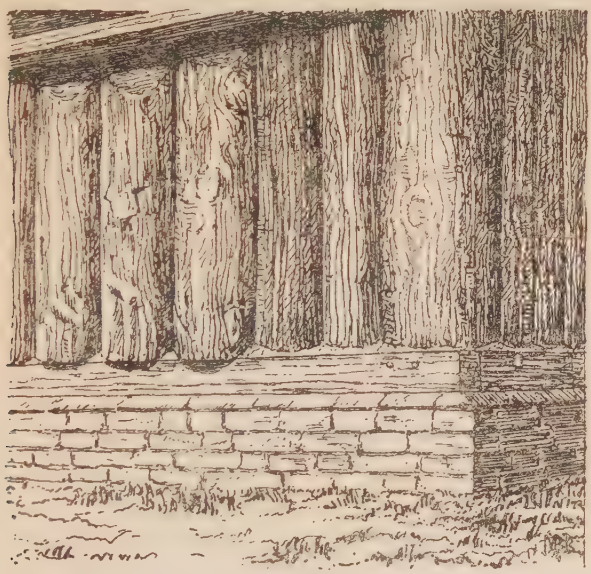


Fig. 18.—North-west corner of timber church at Greenstead, Essex.

to regard the corner pieces, the sills, and the horizontal lintels as answering to the framing of the more scientifically constructed Norwegian churches. As a fact there are at Greenstead no corner pieces, but the corner is formed of a bole just like the others the only difference being that a quarter is taken out of its section instead of its being split in half; see Fig. 19, which shows the ground plan of the north-west corner.

The same compact or block house system is shown in the representations on the Bayeux Tapestry of the timber

structures that surmount the moated mounds, several of which are figured[1] in the needlework. They seem put together just in the manner illustrated at Greenstead and furnish an additional argument against the theory that the ordinary half-timber work of later mediaeval times goes back to the Viking age.

These arguments, which so far as they go militate against the professed derivation of Saxon pilaster strips from wood-work, will be strongly reinforced when the real origin and history of the features in question come to be investigated.

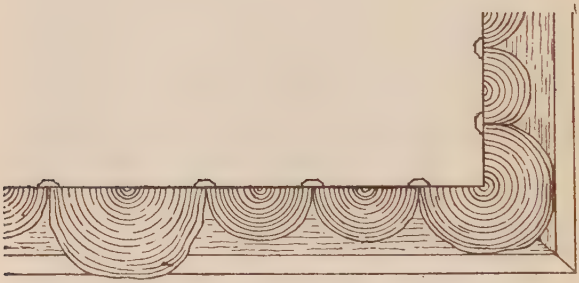


Fig. 19.—Plan of north-west corner at Greenstead. Scale, $\frac{1}{20}$ of nature.

It will be shown in the sequel that the Saxon pilaster strips are not sui generis and are not of British origin. Their prototypes are to be found abroad, and neither in their original home on the Continent nor among ourselves are they derived from work in timber.

On the whole then we must negative the hypothesis that either Danish or earlier Saxon timber technique supplied models for Saxon stone architecture.

Putting now aside the idea of direct Danish influence exercised through wood technique, we may ask whether any other foreign sources suggest themselves for the features of Saxon architecture in the middle and later epochs. As in the earliest epoch so here also, Italy has been laid under con-

[1] Vol. I, p. 110.

tribution, and a direct Roman origin has been claimed for some of the later as well as the earliest of our Saxon forms. The hypothesis of an Italian derivation has seemed indeed to present itself naturally to the minds of most of the writers who have discussed pre-Conquest forms, and it is necessary to inquire how far this evident predisposition can be justified.

Attention has been already directed to the special attraction which, from the days of Benedict Biscop and Wilfrid, was exercised upon the English by Rome. The intercourse with Rome begun in the seventh century was close and long-continued, and would reasonably account for the adoption of Italian fashions in architecture. The letters of Boniface show that in his time there was in some quarters a morbid craving for the spiritual exaltation won by a visit to the tombs of the Roman saints, and devout women not a few embarked in consequence on the long and hazardous pilgrimage.[1] The English were for centuries among the best customers of the Roman purveyors of relics, and the frequency of pilgrimages in the later Saxon period is attested by the effort made by Cnut to secure a safe passage to and fro through central Europe for those bent on the holy mission.[2] And it was not only persons of a specially devotional or mystic turn of mind that were drawn to Rome. Alfred had an ecclesiastically minded father who sent him there as a youth, and later on he accompanied thither again his parent Æthelwulf; Cnut however and Harold, the two strongest and least ecclesiastically minded men of the England of the last half century of Saxendom, also visited the sacred sites and secured their relics with as much pious devotion as the rest of their fellow-kings and subjects.

These numerous English pilgrims, all receptively inclined, might easily, one would think, have brought back with them new architectural ideas that they would put in practice at home. When they had deposited their precious burden of relics

[1] *Bonifatii Ep.* 30, 32, 53, in Migne, *Patrol. Curs. Compl.* LXXXIX, 726 f.

[2] Cnut's 'Declaration.' See Liebermann, *Gesetze der Angelsachsen*, I, 276.

within the altar of some English church perhaps of their own advowson, what was more likely than that they would alter or enlarge or rebuild the edifice in a style reminiscent of the holy sites that had yielded the treasure? This natural suggestion seems to find confirmation in the fact that one characteristic Late-Saxon architectural form does occur abundantly in Italy, whence at first sight it would seem to be derived. This is the double, triple, or multiplex opening divided by one or more shafts in the belfry stage of towers, a feature almost universal in the Roman Campanili, and one that is familiar, in its simplest form of the double opening, in the bell towers of the eastern districts of England. This proof of connection has appeared so cogent that the Saxon bell tower has come to be very commonly regarded as an Italian importation, and we may take as typical the remark of Professor Willis 'that the Saxons did imitate Roman models is shewn by the very midwall shafts of the Saxon windows which are directly copied from those of the Roman Campanili.'[1]

The facts of the case however seem to be that these belfry openings, though classical in their origin, were not derived by our builders immediately from Italy, but from a much nearer region of Europe that had itself borrowed the feature at an earlier period from its Italian originators. Familiarity with its use in Italy may have influenced our later Saxon builders, but they did not themselves import it from thence. It came to us from Italy not directly or at an early period, but at a late period and through the medium of Germany. The proof of this is to be found in the fact that in this country the feature occurs in close connection with other features that are not Italian but are German, while it can be shown that there is an equal a priori likelihood of a derivation from Germany as from Italy. This brings us to the general question of German influence on Anglo-Saxon England, upon which some remarks were offered in the previous volume.[2]

[1] *Architectural History of Canterbury Cathedral*, p. 30. [2] Vol. I, p. 215 f.

The marked similarity in certain special features between later Saxon buildings and those of a large region of Germany is a fact that no unprejudiced observer will deny. If it be not so generally recognized as are the supposed Italian affinities, this is due to the fact that local phases of architecture in Germany are not so familiar to us as those of the more attractive and more freely visited peninsula. In the chapters which follow opportunity will be taken to point out in detail the resemblances here spoken of, and in this place it will be sufficient merely to glance in a general way, first at the political and social ties that linked together Anglo-Saxon England and the Germany of Carolingian and later times, and next at the characteristics of German architecture in those features of it that seem to bring it into special connection with our own.

In the latest Anglo-Saxon period the time of Harold, bishop Stubbs notices the connections in political and religious matters which then existed between England and Germany.[1] In the earliest or pre-Danish epoch of Anglo-Saxon culture a similar comment was made from the archaeological side by the late Albert Hartshorne in his well-known work on English glass vessels.[2] He there points out as a somewhat unexpected fact, that whereas at the close of the seventh century Benedict Biscop, when he needed the aid of workers in glass, sent for them to Gaul,[3] in the next century Cuthbert abbot of Jarrow in a similar case transmitted his request for the aid of experts in glass working to his countryman Lul at Mainz upon the Rhine.[4]

[1] 'The intercourse of England with Germany was close at this time. The Emperor had married a daughter of Cnut, half-sister of the King: the Athelings, Edmund and Edward, had married nieces of the Emperor. . . . German Clerks were at the head of the Wessex Church.' *The Foundation of Waltham Abbey*, Oxford, 1861, p. ix.

[2] *Old English Glasses*, Lond. 1897, p. 113.

[3] Bede, Historia Abbatum, in *Baedae Opera Historica*, ed. Plummer, Oxford, 1894, 1.

[4] Migne, xcvi. 839.

The fact is really the key to a good deal of the artistic history of the period. It signalizes the concentration of the culture of the Carolingian dominions in the Rhineland provinces which formed the eastern wing of the Frankish realm, and emphasizes the already established connection of Anglo-Saxondom with that region. The empire of the Franks, which was enlarged and consolidated by the chieftains who preceded Charles the Great, extended from Spain to Saxony and Bavaria, but from the first it tended to fall into two halves, the earlier Neustria and Austrasia prefiguring the later France and Germany. In the time of Charles the Great there were two chief centres of culture one in each division of the empire, Tours upon the Loire and Charles' own favoured seat at Aachen near the Rhine. The English came into contact with both west and east, for Alcuin was settled at Tours and planted in its school his own Northumbrian learning, while Willebrord and Boniface wrought for the conversion of Frisia and central Germany. We have seen that these missioners were accompanied and followed by a large number of Anglo-Saxon fellow-workers[1] so that a special connection was at once set up between our own country and the regions beyond the Rhine. The intercourse was not only religious but political. The Carolingian court was the recognized refuge for English political exiles[2] and at the close of the eighth century the famous Ecgberht of Wessex had stayed with Charles the Great in this capacity for more than a decade. A little earlier than this there was intercourse between Charles and the most powerful of the English local kings, Offa of Mercia, and Ecgberht's son and successor, Æthelwulf the father of Alfred, took for his second wife a daughter of Charles the Bald, while in a later generation grand-daughters of Alfred and sisters of king Æthelstan wedded the Carling Charles the Simple, and the Emperor in Germany, Otto the Great of Saxony, and established a tradition

[1] Vol. I, p. 216.

[2] J. R. Green, *Short History of the English People*, ch. I, §14.

of alliance which was maintained as we have just seen to the Conquest.

In the domain of culture and of the arts the character of the connection between England and Germany changed from what it had been in the earlier Carolingian period. At the epoch of Northumbrian greatness the Frankish world was receptive, but the first half of the eighth century brought about an alteration in the mutual relations of the two regions. Northumbria as we have already noted had declined even before the first Danish keel put to land at Lindisfarne, while the distinction of the court of Charles the Great was as great in learning and in the arts as in laws and arms. If the glory of the Carolingian age was dimmed under the weak successors of Charles who opposed so feeble a resistance to the Vikings, the rule of the Ottos of Saxony again ushered in a flourishing period of European culture and art.

In one sense the Old Saxony of the tenth century was like the New Saxony, in its insular home, of the seventh. In our own Kent and Northumbria at the earlier epoch, a Christian culture partly fashioned on Roman models had been established in regions that had been almost wholly de-Romanized; in the continental Saxony of the post-Carolingian period, a region that had never formed part of the Empire, and had received its Christianity as an importation at a comparatively recent date, became the centre of an activity in learning and art that the Germans claim as the first truly native expression of their national genius. The religious life, and the learning which depended on the religious life, of the regions in question were as we have seen largely owed to the emissaries from Anglo-Saxon England, but so soon as the line of Henry the Fowler was established in its imperial state, this quarter of Europe, saved by its inland position from the ravages of the Vikings, developed a culture which rose above the level that was anywhere else attained. It is one of the outstanding facts of the architecture of the central mediaeval period that among existing buildings of importance

that exhibit the Romanesque style in its developed form, the first in point of date is the convent church of Gernrode in Saxony. The minster of Charles the Great at Aachen which in the books begins the long series of Romanesque monuments, is not Romanesque but rather Early Christian in style. Gernrode, which dates substantially from the last half of the tenth century is genuine Romanesque, and there is scarce another monument of its class the date of which is so early and so assured.

The whole architecture of this great region north-east of the Rhine, won for Christianity under the Carlings, assumes a special character that we shall do well to note. The region embraces what we know as Thuringia, Saxony, Westphalia, Rhenish Prussia, and the provinces of the lower Rhine; and the architecture of it differs from that of the other parts of the vast Carolingian empire. The old political distinction between Neustria and Austrasia is here reproduced, and the Romanesque of the western or Neustrian part of the empire develops on lines distinct from that of the Austrasian regions extending eastwards beyond the Rhine. The first is represented centrally by the architecture of Normandy, and Norman forms differ in many marked characteristics from those of Westphalia or of Saxony.

This fact lies at the foundation of any systematic treatment of the later Anglo-Saxon buildings. In several of their most characteristic features these only reproduce what is common in the Trans-Rhenane provinces, and though Anglo-Saxon buildings have other very distinct features of their own which give the style independence, yet they have so much in common with German ones that we shall probably be right to reckon our own country, in the century before the Norman Conquest, an autonomous province of Austrasian architecture. Later Anglo-Saxon architecture, it should be clearly understood, has no special affinity with Norman, but on the contrary, till the fusion of the two realms at the Conquest, it represented a quite distinct architectural tradition. At the time of the fusion

there do appear forms uniting Saxon and Norman characteristics, but until the Norman element definitely makes its appearance the two styles have very little in common, and for this reason it is as a rule comparatively easy to distinguish a Saxon from a Norman structure.

The task now before us is first to indicate these characteristics in which Austrasian Romanesque differs from Neustrian, and next to give the reasons for including later Anglo-Saxon architecture in the former province; only those points which are of real significance for the purpose in hand will be taken into account. It will be convenient to adopt the following division, and test the principle here laid down with reference to (1) technique (2) distribution of the parts of a building (3) treatment of wall-surfaces (4) openings (5) details.

(1) The architecture of the Frankish realms had an existence before the time of Charles the Great though it is impossible to date its early monuments with any assurance. There is a class of these monuments however that have remarkable and early-looking peculiarities of technical treatment. They appear on the whole to be pre-Carolingian, and they exhibit a modification of Roman technique in a direction corresponding to the tendencies of Merovingian times. They are built on a Roman method with core and facing, and exhibit the so-called 'petit appareil' of Gallo-Roman monuments in which the facing stones are of the small square Roman shape and are often seamed with lines of brick. The curious St. Jean at Poitiers, and the church of Vieux-Pont-en-Auge near Mézidon in Normandy are good examples.[1] The special peculiarity of the class of buildings in question is the diversifying of this facing by a studied mosaic in which geometrical patterns are formed by zig-zags, hexagons, herring-bone work, stars, etc. The best known

[1] These buildings are now generally dated later, see Enlart, *Manuel d'Archéologie Française*, Paris, 1902, 1, 155 f. They are however so strikingly unlike Carolingian work in Germany that the earlier date seems in the meantime equally probable.

examples of this work are at Cravant near Chinon on the Vienne; St. Christophe, Suèvres; Savenières, and especially the so-called 'Clara Thurm' at Cologne, almost the only bit of pre-Romanesque building now visible in that ancient city. The work is nothing but an extension of the Roman fashion of facing with 'opus reticulatum,' herring-bone work, and the like, and the elaboration of it corresponds to the sumptuousness in personal attire and accoutrements that characterized the Merovingian princes and nobles.[1]

This mosaic-like distribution of facing stones is of course in less pretentious forms familiar in Norman architecture, and the south-west corner of the infirmary cloister at Westminster shows an early example of it in English Norman building. It hardly occurs however in the Austrasian province, save in the already quoted example of the Clara Thurm at Cologne and one other small Rhineland building of peculiar historical importance.

This is the entrance gatehouse to the cloister of Lorsch between Worms and the Odenwald. It is figured in all the architectural books, but has recently been made the subject of a careful monograph by R. Adamy[2] which throws a welcome light upon its origin and character. The arguments there urged appear satisfactorily to fix the date of the notable little monument about thirty years earlier than Charles the Great's minster at Aachen, or about 764 to 774 A.D. It was built under the auspices of a brother of Chrodegang, bishop of Metz, the author of the canonical rule, and with the help of monks transferred to Lorsch from a convent near Metz, from the neighbourhood of which city part of the material of the structure was conveyed. It is therefore not an architectural product of its own locality, but really belongs to the region west of the Rhine, and will thus fall into line with the other mosaic-faced structures of the Neustrian province.

[1] Vol. I, p. 233.

[2] *Die fränkische Thorhalle und Klosterkirche zu Lorsch*, Darmstadt, 1891.

The monument is one that we shall have to examine more narrowly, but for the moment all that needs to be said about it is that it is no exception to the rule that ornamental facing treatment of stonework belongs to the western provinces of the Frankish empire.

It is noteworthy that neither in the minster at Aachen nor in any other genuine Carolingian structure, such as the basilica of Eginhard at Michelstadt in the Odenwald, do we find this ornamental facing, nor is it a feature in Saxon or Westphalian

FIG. 20.—Front and side view of the western end of the Minster at Aachen, according to the restoration by C. Rhoen.

architecture. It is a non-German peculiarity, and it does not occur in Anglo-Saxon architecture save in one or two examples of herring-bone work of which the most remarkable is found in the interior of Diddlebury church, Shropshire.

The presence or absence of classical core-and-facing technique forms then the first point of difference between the western and eastern provinces of the original Frankish realm. We pass now to the second point.

(2) The distribution of the parts of a building. An indication of one or two points of special significance is all that can here be attempted. The influence of the central

or domed church in the development of European architecture is a well-established fact, and few examples of this type have exercised such influence more strongly than the minster of Charles the Great at Aachen. For the purpose in hand we are not concerned with the main structure, the general plan of which is that of a central octagon with concentric aisle and gallery above, but rather with the imposing western forebuilding which contains the entrance portal and serves other purposes presently to be explained. This has been altered in its upper portions in later times but the original form can be recovered, and it seems to have presented the appearance shown in Figs. 20 and 21 which are founded on the restoration published some years ago by C. Rhoen of Aachen.

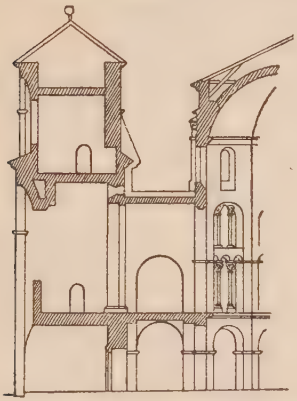


Fig. 21.—Section of western end of the Minster at Aachen.

The front view, Fig. 20, shows us that the façade is almost entirely occupied by a wide and very lofty but shallow niche, the lower part of which is pierced by a spacious archway giving access to a vestibule at the end of which is the square-headed portal of the church, closed by great bronze doors. On the upper story on the level of the gallery round the main octagon there is a space corresponding to the vestibule below, and this apparently opened to the façade through a large window, divided up, like some late Roman and Byzantine windows, by columns in two pairs separated by an architrave carried by three small arches. Towards the octagon also this space was screened off from the gallery by columns. Two stair turrets, irregularly semicircular in plan, flanking the forebuilding give access to this upper space, and the stairs were carried still higher till they ended on the level of a chamber forming the third story of the building. This

chamber was used for the bells, to one of which is attached a story containing so valuable an indication on the subject of campanology, that it is added in a footnote.[1] On this western front of Aachen it will be necessary to linger awhile.

In the introduction to an elaborate study of the Carolingian buildings at Werden a.d. Ruhr in Rhenish Prussia a recent author, W. Effmann, writes as follows about the historical importance of the treatment of the western ends of early Romanesque churches. 'Western forebuildings'—for so the writer's compendious term 'Westwerke' may be translated—'in their purpose their origin and their various forms have hardly yet been touched by the investigator. They are often confused with western choirs and western transepts, and their influence on the development of the tower and the façade has never been properly recognized.'[2]

Such systematic study of the western ends of Romanesque churches as is here spoken of must start from Charles' minster at Aachen. This contains in itself the germ of many of those features the varied treatment of which supplies interest to the history of the Romanesque façade. If the flanking stair turrets be brought into greater prominence and the central portion

[1] Charles the Great gave a commission to a bronze founder at Aachen for a great bell and supplied him with a quantity of silver to mix with the baser metals in his alloy. The fraudulent craftsman abstracted the silver and used a cheaper substitute. When the bell was cast and hung in the bell chamber it refused to move until the founder came beneath it to try his skill with the ropes. Thereupon down came the huge clapper of the bell upon the guilty head beneath and its weight was such that it crushed him into a shapeless mass. The legend is recorded by the monk of St. Gall about the year 884 so that bells of large size are established, at least in the most important centre of European art, as early as the time of Charles the Great, or at any rate that of his biographer. See Pertz, *Mon. Germ. Hist.* Script. II, 744.

[2] W. Effmann, *Die Karolingisch-Ottonischen Bauten zu Werden*, Strassburg, 1899, p. vi.

between them correspondingly reduced, the result is the twin-towered façade with vestibule and western gallery between the lateral masses, that is so common in advanced Romanesque in all lands north of the Alps. This form of façade composition belongs to northern Romanesque in general, but there are other forms of composition suggested equally by Aachen that are specifically German. If the central forebuilding be emphasized it will grow into imposing though at times somewhat clumsy masses like those which are reared at the western ends of churches such as the Liebfrauenkirche at Maestricht; St. Patroclus, Soest; or Paderborn. The half-round stair turrets, less important in proportion to the centre than at Aachen, are in most buildings of this class still retained, but they may on the other hand shrink and disappear so that the central portion stands out alone as a single western tower.

It is a well-known fact that single western towers with or without the lateral adjuncts are characteristic of the architecture of Westphalia and of the provinces of the lower Rhine, but are comparatively rare in other districts of Romanesque architecture. That these single western towers of the regions named are directly derived from the western forebuilding at Aachen is a debateable point, but there is no question that a modification of Aachen would without difficulty produce them, and that Aachen, by far the most conspicuous European building of the early Romanesque period, is a presumable source of architectural influence for the eastern part of the Carolingian realms.

Not only the western tower but the western choir also, another characteristic German feature, may be found in germ at Aachen. In the original form of the building the eastern choir and the western forebuilding, both on the ground level and the gallery floor, exactly correspond. If there is one peculiarity more than another which separates the architecture of the eastern or German from that of the western or French province it is this correspondence, so common in

Germany, between the entrance and the altar ends of churches. The form that the correspondence generally takes in Germany is that of a repetition in a western apse of the plan and arrangement of the apse at the east, and Aachen especially on the gallery floor seems to prefigure the combination.

What has now been said is sufficient to show that the disposition of the parts at the entrance ends of churches marks a difference between the architecture of the eastern and that of the western province of the old Frankish empire. The difference is not an absolute one; it must not be supposed, that is to say, that all German façades are different from French. The typical Romanesque elevation where twin lateral towers flank a lower central portion, is as much at home in Germany as in the other architectural districts north of the Alps. Indeed the twin-towered façade at Corvey in Westphalia is one of the earliest examples of the type that can be named. The similar façade at St. Castor, Coblenz, dates in its lower part from the end of the ninth century. Gernrode, the original scheme of which embraced a front of the kind flanked by round towers, was planned about 960, St. Pantaleon at Cologne with its square lateral towers a few years later, and these early examples prepare the way for the use of the same scheme in numberless churches of the Rhineland and farther Germany.

The point is that in Germany at all periods of Romanesque we find the single western tower claiming its place as a feature of monumental structures side by side with the twin-towered scheme, and in the Rhineland capital the noble Apostles church and St. Mauritius reared their single western towers in the same city that showed the flanked façades of St. Pantaleon and of the ancient cathedral. In some German examples, as at Maursmünster, near Strassburg, the flanking towers are retained but a central western tower makes its appearance between and overtopping them, while in some regions, as in Westphalia and a large part of

Rhenish Prussia,[1] the latter feature suppresses and ultimately supersedes the double arrangement, till it comes entirely to dominate the composition of this end of the building.

Save in England alone we do not find this treatment of western ends in vogue in any of the other districts of Romanesque architecture. Single western towers do occur in France, and Dehio and von Bezold, who remark on their imposing character, consider that they had originally a defensive intent. Examples are to be found at St. Germain des Prés at Paris, at Poissy near the capital, and in the regions to the west (St. Savin near Poitiers) and the south (Notre Dame des Doms, Avignon). They are uncommon however in the northern districts with which we are most concerned. In Normandy for example the single western tower is in the Romanesque period a great rarity,[2] though one occurs at Notre Dame d'Esquay in Calvados. There now exist western towers attached to numerous churches in the Duchy, but these are nearly all of much later date when the influence of English fashions was operative.[3] As a general rule in the case of large churches, south of the Alps the towerless Early Christian façade,[4] north of it the twin-towered façade, is the prevailing form, but in Germany and England the single western tower claims equal consideration. This fact is clear, but the significance and historical explanation of the fact are problematical. An architectural connection between England and Germany is certainly suggested, and this would agree with our general reading of the historical relations which bound together the two regions.

[1] A survey of the monuments of this region is given in the work edited by Paul Clemen, *die Kunstdenkmäler der Rheinprovinz*, Düsseldorf, 1891, etc., a model publication of its kind.

[2] 'En Normandie,' writes Ruprich Robert about the 'clochers,' 'nous n'en voyons qu'exceptionnellement sur les portes d'entrée des nefs.' *L'Arch. Norm.* p. 97.

[3] See de Caumont, *Statistique Monumentale du Calvados*, Paris, 1846, etc.

[4] The twin-towered façades in the peninsula occur mostly in the south of it and in Sicily, where they are accounted for by Norman influence.

The general considerations already adduced would lead to the hypothesis that the scheme travelled from Germany to England, but it must be noted that there are peculiarities about some of our English western towers that appear so far as we can see to be original. In point of actual date, again, some of our pre-Conquest western towers are earlier than the existing single western towers of Westphalia and other parts of Germany. It has been suggested above that the germ of the single-towered façade may be discerned in the western forebuilding at Aachen. As a fact, though Aachen in its main feature, the central plan, was immediately influential in churches such as Germigny les Prés by the Loire, we do not find monumental evidence of any immediate influence exercised by its western front. This does not however invalidate the hypothesis under consideration. The influence of Aachen was continuous, and the west choir of Essen in Rhenish Prussia at the end of the tenth century, and Ottmarsheim in Elsass at the middle of the eleventh, are both modelled on the famous octagon. In like manner the western forebuilding at Aachen may have served as prototype for the cathedrals of Paderborn and Minden of the early part of the eleventh century as well as for the Apostles church at Cologne and the very numerous later examples in the regions already indicated.

It is always possible that examples intermediate between Aachen, and, say, Minden, at one time existed but have now disappeared. In any case, as the object at the moment is not to discuss theories, but rather to place facts and hypotheses before the reader as materials for future use, this subject may now be left.

(3) Passing then to the subject of the treatment of wall surfaces, we have the striking difference between the provinces which it is our object to contrast, that the buttress, a marked feature of Norman Romanesque, hardly occurs in the Romanesque of Germany, where its place is taken by the so-called

'Lisene,' a feature with some superficial resemblance to a buttress, but differing therefrom in that it is a decorative rather than a constructive adjunct. Aachen it is true posseses buttresses, for these occur in pairs at the angles of the central octagon the corners of which they are designed to strengthen against the thrust of the domical vault. It is however noticed by Dehio that after this the buttress almost disappears from German Romanesque though it is found abundantly in the western province.[1]

The German Lisene differs from the buttress in the following characteristics. The buttress may as in Early Norman buildings be of slight projection, but in that case it has substantial width and represents a real addition to the strength of the masonry. The Lisene is also of slight projection but is at the same time narrow so that it hardly increases the lateral stability of the wall. While buttresses, especially in Norman work, appear first of all as strengthening the corners of buildings, and when they are distributed along the wall have generally some relation to structure and inner arrangement, the Lisenen are disposed along the wall-surface in closer juxtaposition than would be the case with buttresses, and are out of relation to the internal construction.

It has been noticed about these German Lisenen, as about our Anglo-Saxon pilaster strips, that they look like the uprights of half-timber work. We are fortunate however in being able to trace back the history of the feature in German buildings till we find it originating not in any form of wood-construction but in the classical pilaster that is so familiar a feature in later Roman architecture.

To establish this we have only to turn to the small structure at Lorsch near Worms already referred to. The restored view Fig. 22[2] shows the upper story of the little building diver-

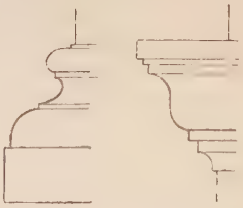
[1] *Kirchliche Baukunst*, I, 154.

[2] This illustration, from Fergusson's *History of Architecture*, has been kindly lent by the publisher.

sified with upright pilasters joined above by those straight-sided arches, that are also a feature for which a timber origin has been claimed. The pilasters are fluted and possess attic bases and

Fig. 22.—Façade of Carolingian Gate-house at Lorsch, near Worms.

debased ionic capitals, while the pieces forming the straight-sided arches are moulded with classical profiles. The rest of the features of this remarkable little structure bear out the impression of its curious classicism in detail. The attic bases and composite capitals of the half columns on the ground story and the imposts of the three main arches (Figs. 23-4), the acanthus on the string course between the two stories, the cornice with its dentels, are all quite orthodox in design and in many instances are carried out with no little knowledge and refinement. R. Adamy's demonstration exhibits the building as the first and most characteristic outcome of the classical Renaissance which was in fashion at the court of Charles the Great. The mosaic-like facing we have already recognized as a development from late



Figs. 23 and 24.—Base of half-columns and impost of main arches, Lorsch.

Roman wall-work rather than as a Renaissance, but the details, which are much purer than any in general use at the time, show a deliberate return to the models of genuine antiquity. The pilasters here are undoubtedly Roman, and if such pilasters be the origin of the Lisenen the latter will also have a classical tradition at their back.

The German Lisenen however, in their normal aspect, as slender strips of plain stonework starting from a plinth without separate bases and joined at the top by shallow arcades of small wall arches, are so unlike these fluted ionic pilasters at Lorsch that some may doubt whether there be any real connection between the two. At Gernrode for example such Lisenen occur, and as Gernrode, which lies at the northern base of the Hartz mountains, is in a wood-building country and one where no Roman traditions existed, its Lisenen might reasonably be claimed as independent creations or as derivations from timber construction. As a fact however there are many intermediate examples, in which debased classical bases and caps attached to the long slender strips place the ultimate derivation of these from classical pilasters beyond reasonable doubt. St. Castor at Coblenz for example exhibits such bases and caps to the strips on the lower stage of its twin western towers of the ninth century, and the west front at Trier with the east end of Mainz, both of the eleventh century, present the same features.

The German Lisenen therefore descend from an original source in the classical pilaster. That the Anglo-Saxon pilaster strips in our own country are derived from the German Lisenen, is the view to which the reader will be asked to give his assent.

(4) In the matter of openings we have to consider (*a*) the double or multiplex opening, commonly used in the belfry stages of towers to afford a passage for sound, and (*b*) the small window pierced for the admission of light. In both of these the forms used in Germany are different from those found in the French provinces, and in both cases Anglo-

Saxon work resembles German, while the Normans are true to their own local traditions of Neustria.

The subdivision of a large round-headed opening by vertical piers occurs in some of the Roman Thermae, and the device is displayed in very prominent fashion at Aachen, where columns in two stories divide the large openings from the gallery to the central octagon, and the window in the west front, etc., while a single fluted pilaster, to which we shall have to return, divides a small incidental opening that can be seen in Fig. 20 in front of the northern flanking turret of the western façade. From Aachen the arrangement was adopted in the tenth century in the parts at Essen which are modelled on the Carolingian minster, and it is claimed for Werden a.d. Ruhr at an earlier date.[1] Whatever be the earliest history of the feature, it becomes normal in German Romanesque of the eleventh and twelfth centuries, and almost all the numerous church towers of that region and period show these subdivided apertures.

It is not the mere subdivision of the single opening that concerns us, for this is certainly not confined to the eastern province, and occurs commonly in belfries in Normandy and other Romanesque districts. The point of importance is the special contrivance by which the arrangement is engineered and which can be judged of from the accompanying drawing, Fig. 25. This method differs from that adopted, e.g. in Normandy, but agrees in the main with that which we shall find represented in the double openings of our Anglo-Saxon buildings. The characteristic difference resides in the fact that in the German example, Fig. 25, as well as in Anglo-Saxon work, the whole thickness of the wall is dealt with at once, whereas the Normans recess the opening so as to decrease in step-fashion the thickness of the wall until only the middle portion remains to be supported by the central shaft.

[1] Effmann, *Die karolingisch-ottonischen Bauten zu Werden*, p. 242.

It may be worth while to pause here for a moment to note the various devices by which in different provinces of Christian architecture the wall between two arched openings is sustained by bringing the weight down upon a central shaft or shafts. The earliest method in point of date is (1) to double the shafts, placing one behind the other so that

Fig. 25.—Double opening with mid-wall shaft in the west front of the Cathedral at Trier, of the eleventh century.

their two capitals support the whole extent of the load. This occurs in Early Christian work in Italy, as at the Baptistry at Nocera previously noticed,[1] and is also in common use in cloisters. We shall find an instance of its employment in Saxon architecture. Italian also is (2) the method of corbelling out the capital of a single central shaft till its abacus corresponds in length to the thickness

[1] Vol. I, p. 348.

of the wall. This occurs commonly in the belfry openings of Italian campanili. The same method is in vogue in German Romanesque, and it is found in one or two examples, Sompting, Sussex; Bolam, Northumberland; Jarrow, Durham, that date before and about the time of the Conquest in England. The procedure most generally adopted in our pre-Conquest architecture is a modification of this. Instead of the capital of the central or 'mid-wall' shaft being itself corbelled out, this shaft is (3) made to support a stone slab, or 'through-stone,' which is long enough to take the whole thickness of the wall. This through-stone is not a capital, for the shaft often has its own capital of the normal square plan under the slab, though it sometimes sustains the slab without the interposition of any capital.

A different method is (4) recessing. This which occurs in advanced Romanesque generally was specially favoured by the Normans. In the recessed opening as just explained, the thickness of the wall is brought down by successive steps till it is reduced to a width correspondent to the abacus of an ordinary capital. When this recessing occurs in openings in English buildings they may safely be ascribed to Norman or later date, as the method was adopted by Saxon masons only occasionally and for archways. In some English belfries which have been assigned to a pre-Conquest date, but are really Early Norman, there is a curious compromise. Recessing is not adopted, and the whole width of the aperture is spanned by a single arch passing through the whole thickness of the wall. An apparent division is however made by inserting a sort of frontispiece in the form of a shaft carrying two subsidiary arches on the external face of the wall. This is done in the magnificent Early Norman tower at Eaton Bishop, Herefordshire, and it occurs also at Burwash, Sussex; Tugby, Leicestershire, and Wendens Ambo, Essex —all structures for which a Saxon origin has been too hastily claimed. The compromise shows that the Norman masons

did not understand the secret of the structural division of the unrecessed opening. Fig. 26 shows some examples of these diverse methods of treatment.

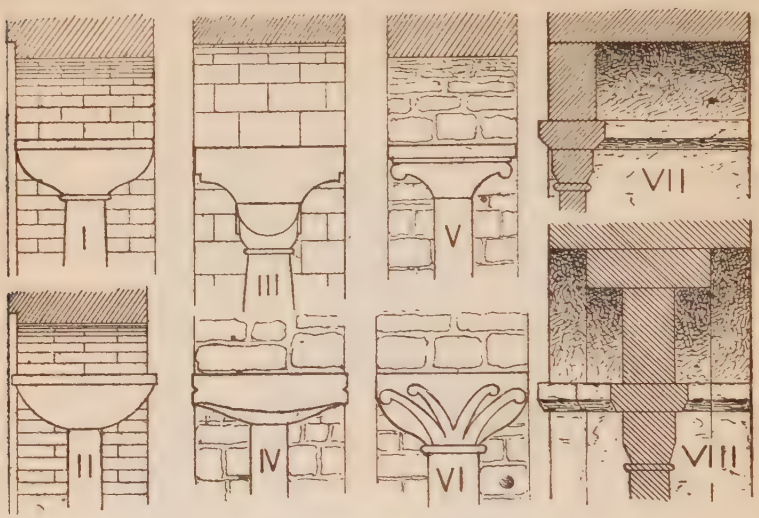


Fig. 26.—Methods of dividing a double opening.

I. Corbel cap on mid-wall shaft, Sta. Pudentiana, Rome. [Italy, 9th century.]
II. Do., S. Apollinare in Classe, Ravenna. [Italy, 6th or 7th century.]
III. Moulded through-stone over cap of mid-wall shaft, Church of Hoven, in Rhenish Prussia. [Germany, 11th century.]
IV. Corbel cap on mid-wall shaft, Jarrow, Durham. [England, 11th century.]
V. Do., west front of Trier. [Germany, 11th century.]
VI. Do., Sompting Church, Sussex. [England, 11th century.]
VII. Division apparent only. [English-Norman, 11th century.]
VIII. Recessing. [Norman, 12th century.]

On the historical relations of these methods it may be safely said that the corbel cap (Fig. 25) originated in Italy where we find it in the numerous towers of comparatively early date at Rome and Ravenna, and that it spread from Italy to Germany. That Italy exercised an influence in this matter over the Rhine provinces is only what we should expect.

Many doubtful theories have been put forward in architectural books about the influence of one Romanesque district

upon another, but the connection of northern Italy and the Rhineland is not to be gainsaid. Lisenen in quite a German form occur on the façade of San Zeno at Verona of the beginning of the twelfth century, while the resemblance between the decorative arcading so common in North Italy and Tuscany, as on the west fronts of the cathedrals of Parma, Lucca, or Pisa, and the dwarf galleries in the upper stages of German Romanesque buildings, is too close to allow of a doubt that there is historical connection between the regions. The use of columns indicates that the influence passed from Italy to Germany and not in the reverse direction, for Italy is the land of the column, and the presumption is that any tradition of the employment of the column would have there its origin. It is quite possible that this same Italian connection accounts for the extensive use of the column in general, as an architectural feature, in Germany as compared with France. In Germany, far more frequently than elsewhere in the north, we find the column utilized in nave arcades, either in place of, or alternately with, the pier, and it is to be noticed also that the German columns so employed often exhibit in distinct and even exaggerated shapes the classical entasis and taper.

This particular form of the subdivided opening originates therefore in Italy and was conveyed from there to the Rhineland, and it will be made apparent in the sequel that Germany transmitted it at a later day to Anglo-Saxon England.

For the other form of opening of which there is here question it is not easy to fix the place of origin, but it is specially characteristic of Germany and of pre-Conquest Britain. This is the so-called double-splayed window, in which the aperture for light is at or near the centre of the thickness of the wall, and the jambs are sloped away towards the outer faces.

The Early Christian basilicas at Rome and Ravenna, and wherever else they are sufficiently preserved, possess large

windows cut through walls that in Italy at any rate are comparatively thin. Hence they are either driven in classical fashion straight through the walls, or else are very slightly splayed in the interior. Later on in early mediaeval times the apertures for light were considerably narrowed, and as the walls were as a rule correspondingly thickened, some kind of splaying to assist the diffusion of light was rendered necessary. This was accomplished in two ways, the most common method being to locate the aperture in the outer face of the wall and splay the jambs and sill towards the interior. This method is exemplified in French work generally, and is universal in the Norman Duchy. It is used also in a Carolingian work of great historical importance, the church erected by the famous Eginhard early in the ninth century at Michelstadt in the Odenwald in Germany. Here the church is lighted by round-headed and by circular openings all widely splayed on the interior, and for the small windows in churches like Michelstadt of a modest size, we may take this form to have been at the time normal in all the Carolingian realms.

About this epoch however, the alternative arrangement of the double splay makes its appearance. The lower stage of the rotunda at Fulda of 820 A.D. possesses it, and if Professor Adler is right the eastern end of the interesting little church at Niederzell, in Reichenau, near Constanz, can show still earlier specimens.[1] Part of the crypt at the eastern end of Werden a.d. Ruhr, of the ninth century, exhibits the feature. A series of more or less dateable examples, such as one in the north flanking turret of the west front of St. Pantaleon, Cologne, of about 980 A.D., and one now blocked in the north wall of Bishop Meinwerk's Bartholomäus Kapelle to the north of the cathedral at Paderborn of the early eleventh century, bring us to the central Romanesque period when this feature becomes very

[1] Adler, *Baugeschichtliche Forschungen*, Berlin, 1870, 1, 9.

common in the smaller openings of German churches. An example from the west front of Trier of the middle of the eleventh century is shown in plan in Fig 27.

In this double-splayed window accordingly we can see another peculiarity of the eastern province, for Norman architecture is innocent of it, while by its occurrence in the pre-Conquest work of our own country it provides another point of attachment by which we can associate with Germany our later Anglo-Saxon building.

Fig. 27.—Plan of double-splayed window, west front at Trier.

Fig. 28.—So-called 'mushroom' capital, from Werden a. d. Ruhr, Rhenish Prussia.

(5) In the matter of details, the only point to which attention needs to be specially called is the characteristic forms of capital used in the two provinces.

Carolingian architecture either employed ancient Roman caps as in most instances at Aachen, or else imitations of antique corinthian or composite capitals executed sometimes with no little care. Some of the best of these are to be found on the little Vorhalle at Lorsch. The same imitation of classical models continued, and in the vestibule at Corvey of the ninth century, the western building at Werden of the beginning, and Essen of the end, of the tenth, and the Bartholomäus Kapelle at Paderborn of the early part of the eleventh, we find elaborate but more rudely executed reproductions of the same models. Side by side with these classical

imitations there occur in the tenth century at Quedlinburg[1] and at Werden one or two examples of a form of cap for which Dehio has invented the name 'Pilz' or 'mushroom' capital, and which has the profile shown in Fig. 28.[2]

From the eleventh century onwards the place of honour among German capitals is assumed by the so-called cubical cap, produced by the intersection of a cube and a sphere of diameter equal to its diagonal, which becomes normal in the buildings of the eleventh and twelfth centuries. The origin and history of the form are still matters for discussion, and some have claimed for it a Byzantine origin,[3] while others see in it a direct derivation from woodwork.[4] We are only concerned here with the fact that, either in its purer geometric forms, or else enriched and modified in somewhat fantastic fashions, it is characteristic of German Romanesque, but at any rate till the twelfth century is but sparingly found in the western province. The characteristic Early Norman cap is either debased Ionic or else, as at Jumièges and Westminster, consists in a parallelepiped block rudely chamfered off to fit the top of the shaft. The so-called cushion cap, familiar in Norman work especially in this country, is not an Early Norman form and will hardly be found before the twelfth century.

In England the most common pre-Conquest cap may be described as a cubical cap not well understood. It is of the cubical type, but the orthodox relation between the cube and the sphere is very commonly neglected and abnormal shapes result, some of which appear to be sui generis while for others a very close parallel may be found in some of the irregular

[1] Wiperti-Krypta and crypt of the Schloss-Kirche.

[2] This is worth figuring because Dehio has suggested for it an Anglo-Saxon origin (*K. Baukunst*, I, 194). The present writer knows however of no such capitals in our own country.

[3] e.g. Adler, *Forschungen*, I, 11.

[4] e.g. Humann in the *Bonner Jahrbücher*, Heft 89, 1889, p. 192.

German cubical caps just referred to. In their adoption of the cubical type the Anglo-Saxon builders seem again to be asserting their dependence on Austrasian traditions.

The question with which this chapter opened can now be answered by eliminating any hypothesis of direct Danish influence, but postulating an architectural connection with Germany which must have had considerable importance in relation to our native work. It was said above that Anglo-Saxon architecture, at any rate in its later phase, represents an autonomous province of Austrasian Romanesque. This means that in the grouping of the early Romanesque local styles, which were gradually evolved from the age of Charles of Aachen onwards, Anglo-Saxon work belongs to the German rather than to the French connection. It is in many of its characteristics directly opposed to the Norman work which was destined to supersede it, and in many too it is closely allied to that of Germany. It has at the same time its own individual features, some of which are inherited from its earlier phases in the first period of the age of conversion, while others it seems to have developed as it progressed; and these features it employs to the last side by side with those for which foreign prototypes, or at any rate foreign parallels, can be found. The debt of our pre-Conquest builders to the lands across the North Sea may be freely acknowledged, while at the same time full justice is done to the substantial amount of originality and boldness in our native productions.

CHAPTER III

THE NUMBER, DISTRIBUTION, AND CRITERIA OF THE EXISTING MONUMENTS

The previous volume contained some notice of the conditions under which were erected the monuments, ecclesiastical and secular, of the older England before the Norman Conquest. There were then mentioned military works in the form of town enceintes and entrenchments; the mansions of kings and nobles and the humble dwellings of the burgher or villein; churches of various kinds from the bishop's cathedral and the minster of the greater abbey to the minutest field church or chapel; and finally subsidiary structures of ecclesiastical use attached to monastic or canonical establishments.

Of all these monuments of various classes the only ones that are still effectively represented are the churches. Saxon earthworks exist but have no distinctive character and are in no way architectural. Some of the town enceintes were in masonry, and it is possible that some of the stones now visible in the extant ramparts of Exeter or Chester or Porchester may have been laid by Saxon hands. There are however in these cases no architectural details or technical peculiarities to afford ground for identification. Two portions of existing castellated structures have been specially singled out as Saxon, and it will be well to make it clear that in

both cases the work in question is Early Norman. One is a part of Corfe Castle on the outer enceinte to the west of the keep, where is a piece of walling forming one side of a former hall or chapel, that is obviously of different character from the rest of the structures on the hill. This however possesses all the characteristics of Norman work and has no shadow of claim to be considered Saxon. The other portion of masonry is at Tamworth and forms the facing of the embankment of access to the earthen mound on which stands the keep of Norman and later times.

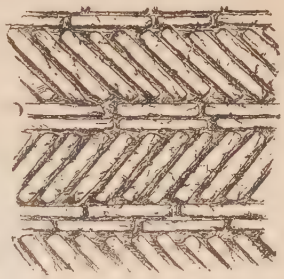


Fig. 29.—Early Norman herring-bone work, part of the facing of an embankment at Tamworth Castle. The stones are about 1 ft. in length.

The work at Tamworth is a particularly good example of the kind of masonry known as herring-bone work, which we have already established as Norman rather than Anglo-Saxon. As the moated mound in general is not to be regarded any longer as of pre-Conquest date,[1] this masonry connected with such a mound takes its place naturally as a Norman production. Fig. 29 shows the manner of it; the characteristic horizontal courses between the bands of herring-bone work should be noted.

Anglo-Saxon domestic structures in so far as they were of wood have not survived. The manor house of the period may however have been in part at least of stone, and the picture of Harold's aula at Bosham in the Bayeux Tapestry may be quoted as evidence of this.[2] There is no reason why portions of pre-Conquest manor houses may not still exist embedded, as was the case with Deerhurst Chapel,[3] in later mediaeval structures, and investigation may yet bring some of these to light.

[1] See Vol. 1, p. 105 f. [2] ibid, p. 104. [3] ibid, p. 332.

In the case of ecclesiastical monuments, though little or nothing in the way of subsidiary structures has been preserved, a very considerable number of churches are represented by extant fragments. Among these are included specimens of most of the classes into which as we have seen[1] Anglo-Saxon churches can be divided. There are bishops' churches, churches of the greater abbeys, town churches, country oratories and chapels. The great majority of the buildings are however what we should now call by the term 'parish churches' though a certain proportion of these were originally, or at one time, monastic. It should be understood at the outset that these extant monuments are nearly all buildings of the second order of importance, and it must not be assumed that they give an adequate idea of the achievements of the Anglo-Saxon architect as a whole. To estimate the architecture of the period aright we have to take into account the literary notices of structures that have now perished, some of which were evidentally of far greater artistic pretension than any of the extant monuments. An estimate of Anglo-Saxon architecture on this broader basis will form the subject of a later section of this volume. For the moment we have to deal with the extant monuments alone.

Any list of such monuments will embrace a few examples that are still more or less completely Saxon, but the majority of the items must consist of little more than remains and indications that have had the good fortune to escape the ravages of time and the zeal of successive generations of builders. In reference to these the question may be asked whether it is really worth while to catalogue a number of fragments of old masonry accidentally preserved, simply on the ground that they belong to a specially early period of our architectural history?

It may be admitted that if this work be done merely in the spirit of the collector, it may easily degenerate into

[1] Vol. I, Ch. III.

something like a 'fad.' To inventory and label so many hundred specimens of Saxon masonry as if they were postage stamps or beetles is not the proper way to deal with them. They have a human and historical as well as an architectural value, and this is not to be measured by the number of stones that make them up. A few cubic feet of walling are sufficient to establish for us on the spot a Saxon village church of stone, and this, with all its fittings and surroundings, its porch, its altar, its graveyard, was the centre of the social movements of that rural community that has remained till quite modern times the unit of the national life. It is a monumental link between ourselves and the older Britain of a millennium ago, and a point round which the patriotic imagination may fitly love to play. And further, these same few stones, when taken with other better preserved examples, may call up before our minds a building that in plan and technique may present striking and original features and furnish material for a new chapter, or at any rate an interesting foot-note, on the architectural history of the middle ages.

From this point of view nothing is really too small to notice. Fragments of moulding or carving or masonry, insignificant in themselves, may be like the one or two bones of the extinct animal, from which the palaeontologist can restore the whole organism. Such fragments moreover may supply chronological information of essential value, and may afford a means of correcting impressions derived from the general appearance and plan of a building. These last are in the Saxon period apt to mislead. Thus, for example, as a basilican church Wing, Bucks, seems naturally to take its place beside the seventh-century basilicas at Brixworth and Reculver, but as a fact, even apart from the advanced form of its crypt, Wing exhibits details that compel us to place it comparatively late. Bradford-on-Avon appears in general character a singularly early church, but when we observe its

double-splayed windows, reckon up its pilaster strips, and note the curious resemblance of its external arcading to that in the interior of the very late Saxon church at Dunham Magna in Norfolk, we begin to distrust the impression of great antiquity. On the other hand, the general aspect of the porch at Monkwearmouth in Durham would suggest a Romanesque rather than an Early Christian origin, but a careful interrogation of the various details and ornaments leads to the conviction that the work is in reality of the early date assigned to it.

No apology therefore is needed for including mere fragments among the monuments we have to consider. So far as a Saxon character can be assigned with what the writer believes reasonable certainty to the monuments in question, they are all indicated on the map of Saxon Churches, p. 344.[1] This represents a personal examination of some three hundred and fifty examples that have been signalized as showing signs of Saxon origin. Other examples no doubt exist that have come under the notice of local observers, though they are not yet generally known, and these would repay investigation. If this investigation, however, were carried out so completely as to cover every visible piece of Saxon masonry in all the British counties, the result would still not be a final one. There is a possibility that at any moment the stripping of plaster from a church wall of uncertain date might reveal unsuspected evidence of antiquity in the masonry below. It is a recognized fact that in a large number of cases the clearstory walls of aisled churches are of earlier date than the arcades which were cut through them in the Norman or later periods, and a good many of these are doubtless survivals from before the Conquest.

It will not have escaped the notice of observers that we find at times an absolutely certain Saxon doorway or window,

[1] An explanatory note is added with the map and index list at the end of this volume, where the criteria relied on are indicated.

as at Somerford Keynes, Wilts,[1] in a wall the masonry of which would not in itself have struck the eye as peculiar. In the absence of any such definite feature a wall that is really Saxon may pass unnoticed, and there may be very many such pieces of walling up and down the country. Hence the following treatment of the subject can only claim to be provisional. Fresh facts may come to light that would tend to modify the conclusions here reached. These are however based on a sufficiently large body of data for them to be offered with some confidence to the reader.

Questions may arise about (1) the number (2) the geographical distribution of the monuments, as well as about (3) the criteria relied on to establish their Saxon character.

(1) The notices of the village church in general quoted in a previous volume conveyed the impression that Saxon England was, in proportion to its population, well supplied with churches, and some have gone so far as to say that the village church was almost as common a feature in rural England before the Norman Conquest as in the days of Elizabeth or George the Third.

There are sufficient incidental references to churches in legal and other documents of the early mediaeval period to bear out this surmise. Numerous churches are mentioned in Saxon land charters and wills and in Domesday, though there is no attempt to give a list of them, to discriminate their different architectural forms, or to indicate which were of stone and which of wood. A Domesday editor has remarked that 'to refer to Domesday as in any way giving us correct information as to the number of churches is useless.'[2] Domesday notices of churches, as we have already seen,[3] are apparently fortuitous, and vary for no assignable reason in the different counties. Whatever the *mention* of a church in Domesday may imply, the *silence* of the

[1] See postea, Fig. 53, p. 102. [2] *Domesday for Wiltshire*, Lond. 1865, p. lxvi.
[3] Vol. I, p. 334 f.

Commissioners is clearly no evidence against the existence of churches in the various localities given in the Survey; while on the other hand the actual numbers indicated in some of the counties and in special places are evidence enough that churches were plentiful. Three hundred and sixty-four are mentioned in Suffolk, two hundred and twenty-two in Lincolnshire, one hundred and eighty-six in Kent, one hundred and thirty-two in Hampshire. Twenty-four localities in Norfolk and sixteen in Kent had more than one place of worship apiece; Norwich city alone possessed fifty-four; Folkestone, Hoo, and Dartford, in Kent, respectively eight, six, and four. One manor in Hampshire, that of Chilcombe, which is said to embrace eight modern parishes, is credited in the Survey with nine churches, a number which would be fully up to modern requirements. Postling, in Kent, which in its fold of the downs looks as if it had not changed since long before Domesday, had at that time two small places of worship.

One caution must be borne in mind in dealing with Domesday evidence. In cases where a church at a certain place is mentioned in the Survey and an edifice of early character is now to be seen on the spot, the tendency has sometimes been to leap to the conclusion that we have a Saxon building before us, though there may be nothing about it of pre-Conquest character. A period of some twenty years elapsed between the Conquest and the taking of the Survey, the date of which is subsequent to 1085-6, and Norman churches may have been built in the interval. This may have been the case for example at Albury and Abinger, in Surrey, where Domesday mentions churches, and we find buildings of Early Norman date now upon the sites. It is interesting to know what is the statistical relation between existing Anglo-Saxon churches and churches mentioned in Domesday; to know, that is, how many churches that must have been standing when the Survey was taken have found a place in

it. Taking the places enumerated on the map, Fig. 175, and leaving out of account the towns, the churches in which are difficult to identify by name, we obtain easily more than a hundred places that can be identified in the pages of the Survey but it is only at forty-five of these places that there is indication in Domesday of a church or even of a priest. In other words, it appears that fewer than half of the existing structures of pre-Conquest date are mentioned in Domesday, and some of the most conspicuous Saxon monuments, such as those in Northants, are ignored in the Survey. All the places in this county where Saxon churches now exist are mentioned, but the entry 'ibi ecclesia' is never added, though the church at Pattishall, a pre-Conquest example, is incidentally referred to in connection with the location of a plot of land.

The presence on a site of carved tombstones and crosses of pre-Conquest type may be held to prove that there existed there in Saxon times a graveyard and in all probability a church. Such monuments however no more prove the Saxon date of an edifice in or near which they may now be found than does the mention of an ecclesia at some special village in Domesday involve the antiquity of its present parish church. They do not tell us whether the church by which they were originally located was of stone or of wood, though it may be noted that their number, which in some parts, counting fragments, is very great, is at any rate evidence of considerable activity as well as skill on the part of the Saxon worker in stone. The ornamental forms and the figure sculpture on these stones are of importance in connection with the decorative details of the churches, but the comparisons thus suggested must be reserved for treatment on another occasion.

Saxon fonts tell us no more than Saxon tombstones, but Saxon sundials have this further value, that, being of stone and forming integral parts of the fabric, they imply a church of this material. A full list of existing Saxon sundials is a

desideratum, and would be a document with some significance for the stone architecture of the pre-Conquest period.

If documentary notices be as we have seen fortuitous, in that no valid conclusions can be drawn from them as to the total number of Saxon churches, the same may be said almost as confidently about the cases of actual survival. No general principle seems to be involved in the complete or partial preservation of certain examples and the total disappearance of others. We cannot say that such and such a percentage of Saxon churches has perished or been preserved. We have no ground even for saying that the churches which have entirely perished owed their destruction to the fact that they were of wood, while the stone ones were, as a rule, preserved. Local circumstances doubtless determined the treatment of the local shrine in the eleventh as in all succeeding centuries of the mediaeval epoch. The timber churches that existed, no doubt in considerable numbers, at the Conquest were gradually replaced by stone structures, and this process which has been going on from the earliest Saxon times[1] is not yet complete, for the wooden walls of one example are still standing; while not only Saxon wooden churches but many Saxon stone churches were pulled down and rebuilt by the Normans. At Lastingham in Yorkshire for example there was a Saxon stone church,[2] but the fabric of the present edifice is Norman. This process of rebuilding stone churches in a later style has been in progress ever since, for Saxon churches, as at Framingham Pigot, near Norwich, have been replaced quite in our own time by modern structures. The cases of complete or partial survival are therefore of an accidental or casual kind, and give us no help in estimating the actual former wealth in churches of Saxon England.

In connection with this subject, it may be noticed that the churches mentioned in the Survey and the charters are referred to under the three terms 'ecclesia,' 'ecclesiola,'

[1] Vol. I, p. 167. [2] ibid, p. 210.

'capella,' which remind us of the division of churches in the law of Æthelred, noticed under the headings 'head minster,' 'minster of middle size,' 'lesser church with a graveyard,' and 'field church.'[1] A study of the monuments gives us no more help towards fixing any architectural significance for these terms than does the study of the records.[2] There are in England two surviving examples of the pre-Conquest capella or ecclesiola existing side by side with Saxon parish churches, an arrangement frequently indicated in the documents.[3] One is at Heysham in Lancashire where the capella is of primitive form;[4] the other is at Deerhurst in Gloucestershire and here the capella is a complete church with a nave and chancel.[5] The Saxon church at Bradford-on-Avon, Wilts, is referred to by William of Malmesbury as an ecclesiola, but though small in size it is somewhat elaborate and possessed nave, chancel, and lateral porches or quasi-transepts.

(2) The distribution of the examples as shown on the map of Saxon churches suggests some comment. They are in the first place confined to England. In the Lowlands of Scotland, though some districts of these received at an early date an Anglian population, the researches of Messrs. M'Gibbon and Ross[6] have not revealed a single example with the special Saxon characteristics. It is true that there exist buildings in Scotland which seem to have dropped the distinctively Celtic motives and yet are not in their features characteristically Norman. The tower of Restennet Priory, Forfarshire, and St. Regulus' Chapel, at St. Andrews, with the upper stage of the round tower at Abernethey, Perthshire, may be mentioned in this connection. They may exhibit a pre-Norman Romanesque contemporary with Late Saxon work, but

[1] Liebermann, *Gesetze*, 1, 264. [2] Vol. 1, p. 309, note. [3] ibid, p. 310 f.

[4] The plan of the early chapel at Heysham, with its surroundings, was given in vol. 1, facing p. 312.

[5] postea, p. 110.

[6] *The Ecclesiastical Architecture of Scotland*, Edinburgh, 1896-97.

they show none of the unmistakeable peculiarities which mark the Saxon style in England. In Wales M. H. Bloxam claimed a pre-Conquest origin for the tower on Priestholm or Puffin Island, but this is clearly Norman, of no earlier date, though of simpler workmanship, than the tower of Penmon priory church on the neighbouring coast of Anglesea. Nothing Saxon seems to have been noted elsewhere in the Principality or in Cornwall. The church of Tintagel in Cornwall has certain features of Saxon character but these are not pronounced enough for it to be placed in our list of examples. The early ecclesiastical buildings in all these parts of Great Britain belong to the types generally termed Celtic, of which a notice has already been given (ante, chapter I). There is one building in Ireland which has been claimed as akin to our own Saxon structures, and this is the western part of the priory church at Howth, on Dublin Bay. This structure however, while it lacks the usual Irish characteristics, does not exhibit any of the special features of Saxon buildings.

Saxon architecture proper is not only confined to England, but, as shown on the map, Fig. 175, it is more especially represented in the eastern and midland counties. Examples, if they exist at all, are very infrequent on the western side of the Pennine chain from Cumberland to the Mersey, in Stafford and Cheshire, and more to the south in the counties of Monmouth, Somerset, Dorset, and Devon. This may, of course, be explained in great part by the late and gradual Teutonizing of the western parts of the country ; but it is not a little remarkable to find in Shropshire a kind of wedge of Saxon architecture driven, so to say, into the midst of the district in whose early ecclesiology Celtic traditions were predominant. The Saxon examples in this county invite the conjecture that a systematic search in the west of England generally might bring to light a good many more. The south-western counties probably contain more examples than have as yet been noticed.

The suggestion just made has wider bearings. Taking not

England as a whole, but the smaller areas of the eight different Districts into which for convenience sake the map has been divided, we note a tendency among the examples to fall into groups, while pretty wide regions are on the other hand left blank. The explanation partly is that when one example in a certain district is brought to light and commented on, the interest thereby excited leads to the recognition of other examples of a similar style of work in the neighbourhood. A group is in this way formed in one district, while in another the initial discovery still remains to be made, and the ground is in the meantime barren. It would be a mistake therefore to attach too much significance to the actual distribution of the monuments on the basis of our present knowledge. These geographical statistics must be regarded as to some extent provisional, and the barren regions should in the meantime be regarded as places where local investigation is specially called for. The question of the geographical distribution, not of the churches themselves simply as churches, but of the special types of churches and of their distinctive constructional or artistic features will be noticed later on.

(3) With regard to the criteria relied on for the separation of Saxon churches from those of other architectural periods, the question in most cases resolves itself into one between Saxon and Norman, and accordingly characteristics which are found in both Saxon and Norman buildings are not of much help in the discrimination of doubtful examples. Features which do not occur in Norman work on the Continent are the most valuable for the purpose in view, and the appearance of them is enough either to stamp a structure as pre-Conquest, or else to prove the survival or occasional recrudescence of native English traditions among Anglo-Norman builders. The word 'pre-Conquest' must of course be taken to refer to style rather than to actual date. Just as the earliest work at Westminster Abbey is Norman though executed before 1066, so buildings that are still essentially Saxon may have been actually reared

after the accession of William. On the other hand some specially Saxon features do make their appearance sporadically in work that must have been done, if not by Norman hands, yet at Norman bidding and on Norman design. There is for example a distinct 'long-and-short' feeling about the massive quoins of the fine Norman gateway at Rougemont, Exeter, and in the jambs of a Norman doorway of the nave at Stow, Lincolnshire; the double-splayed window, a distinctly non-Norman feature, occurs in what must be Norman work on the west side of the cloisters at Norwich; some chancel arches that are Norman in technique have their jambs of a Saxon plan. Such instances occur and must not be ignored. They are however not at all numerous and it would be a mistake to make them of much importance. They do not invalidate the general distinctions of style already laid down.

Any detailed discussion of the special features on which so many of these criteria depend would be useless unless the reader were possessed of some general knowledge of the buildings in question. It will therefore be on the whole the most convenient procedure to introduce the subject as if those were addressed to whom Saxon architecture is as yet only a name. When the main facts have been made clear by description and illustration, the time will have come for an analysis of them from the points of view of origin, date and continental affinity.

Are there any general criteria by which an intelligent observer can distinguish a Saxon church from one belonging to the other mediaeval periods? There is no criterion of absolute validity but there are general symptoms which can be diagnosed even from the bicycle saddle.

The first sight of a country church is generally of its tower and spire. A western tower that is of great height in proportion to its width and of conspicuous plainness will repay interrogation. If it be buttressed at the angles it is no use inquiring further, unless indeed the buttresses can be plainly

seen to be later additions. If it rise gaunt and smooth, the outline only broken perhaps by a single horizontal string-course above which it may slightly narrow, it has Saxon character and it is worth while devoting special attention to the belfry openings. If these be recessed the tower is almost certainly of Norman or later date, but if they possess the special characteristics already indicated in connection with German work (ante, p. 62 f.), the building may be set down as in all probability of pre-Conquest origin.

Only less conspicuous than the tower of a church is the general shape of the body of it. When the side walls of the nave are of great proportionate height there is a suggestion of early date, but the appearance is often deceptive. There are Early Norman churches of remarkable height of walls, and furthermore the height is sometimes merely due to the addition in late mediaeval times of a Perpendicular clearstory on the top of an earlier wall. On the other hand, when further investigation shows that the nave is of very great proportionate length as well as height, a strong presumption of Saxon origin is at once involved. It would be a mistake however to imagine that all Saxon naves are long, or that there is any one scheme of proportion that is exclusively the possession of the style. The analysis of the proportions of a number of Saxon naves the result of which is given in Fig. 30 proves the contrary.

It will be seen that some examples, notably in Kent, are comparatively wide, while others, especially some in the north like Monkwearmouth and Escomb, are long and narrow, while various intermediate degrees of proportion are also represented. The evidence of the extraordinary length of Jarrow old church is the statement in Hutchinson's *History of Durham*, II, 475 f., that it measured twenty-eight paces by a width of only six. The walls were nearly thirty feet high.

The presumption of Saxon origin based on elongated proportions is strengthened if there be any indications that the original pitch of the roof was a steep one. If

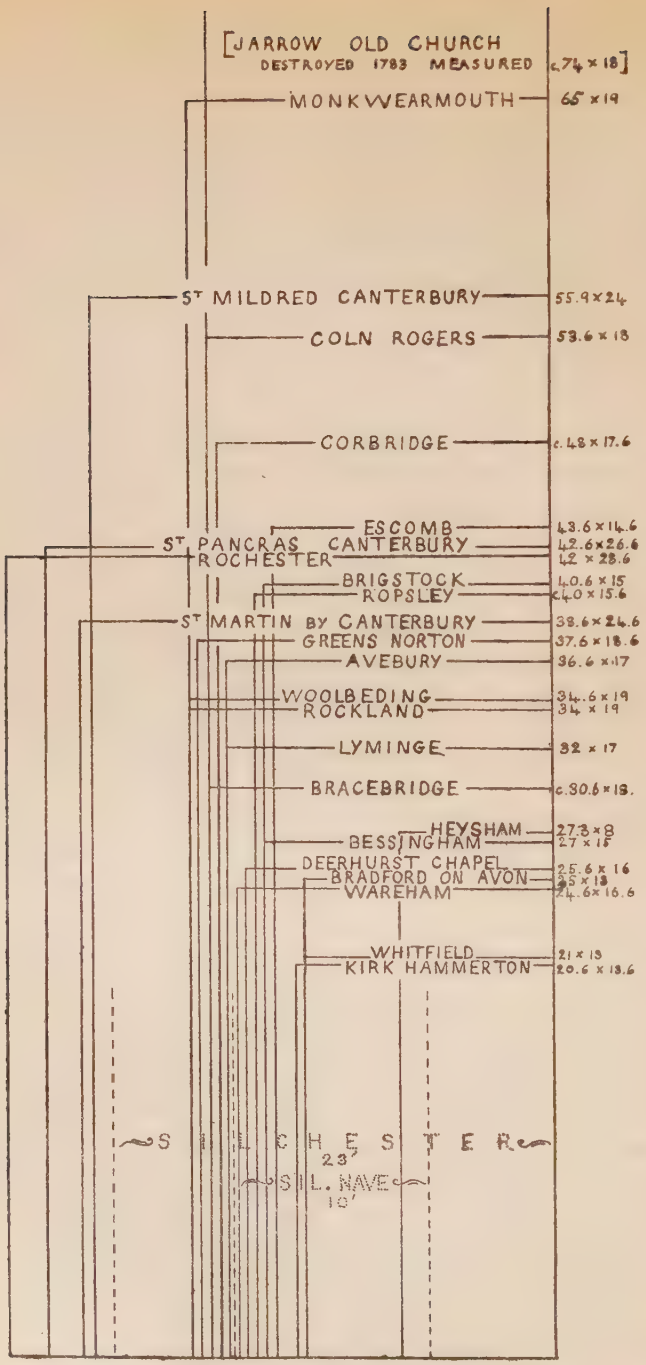


FIG. 30.—Comparative chart showing the proportions of the naves (interior measurements) of twenty-four Saxon churches.

the original gable be not preserved the mark of it is sometimes seen on the wall of the tower, and a sharp-pointed gable is a Saxon peculiarity. If the character of the masonry be then examined some confirmation of the hypothesis of a Saxon origin may be found in the comparative rudeness and irregularity of the technique and the absence of any special treatment of the face, such as herring-bone work. Herring-bone work, which used to be considered a sign of Saxon origin, is now known to raise a presumption to the contrary. More assurance will be gained if the thickness of the wall turn out to be comparatively slight, say from 2 ft. to 2 ft. 6 in. Comparative thinness of wall is a good but by no means an absolute test of Saxon and Norman, and this measurement should always be taken. Norman walls nearly always run thicker than Saxon.

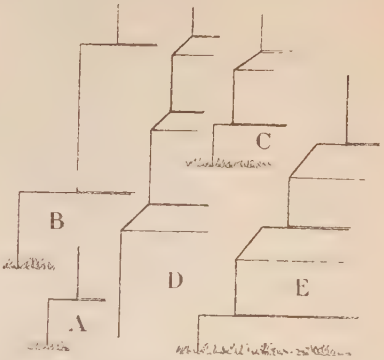


FIG. 31.—Plinths of Anglo-Saxon walls. (Scale, c. $\frac{1}{2}$ in. to 1 ft.)

A. Dunham Magna, Norfolk.
B. Hainton Church tower, Lincolnshire.
C. St. Martin, Wareham, Dorset.
D. Clee, Lincolnshire, plinth to tower arch.
E. Stow, Lincolnshire, south transept.

It may be asked whether the presence of all these indications in proportion, technique, thinness of walling, etc., be not enough to prove pre-Conquest origin? The question can hardly be answered in an absolute form. Every investigator must rely to a certain extent on his personal judgment the exact grounds of which cannot always be strictly formulated. The general aspect of a structure counts for something in any decision as to its date and style, and this can only tell on actual inspection. The local position and surroundings of a building must also be taken into account, and certain kinds of evidence are of more weight in one part of the country than in another.

There is no question however that definite features and bits of characteristic detail are of greater value as criteria than the general aspect of a structure, and in the list of monuments

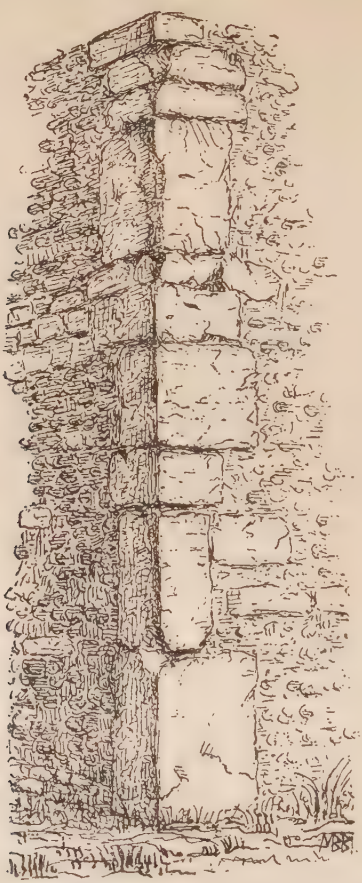


Fig. 32.—Quoin of nave, St. Mildred, Canterbury.

which forms the basis of the map, Fig. 29, reliance has been placed almost exclusively on these definite features, and not on the more general considerations.

Taking these features and details therefore in order, we may note first that a Saxon wall may or may not have a plinth or base-moulding. There are different forms of these plinths in

pre-Conquest work but no one of them is exclusively Saxon. Fig. 31 shows some examples. It will be noted that the profiles of the members are either square or chamfered, and this rustic simplicity in forms is very characteristic of the Saxon style. A moulded plinth with the classical cyma is to be seen at the base of the jambs of the tower-arch at Alkborough, Lincolnshire, but the work is Roman re-used.

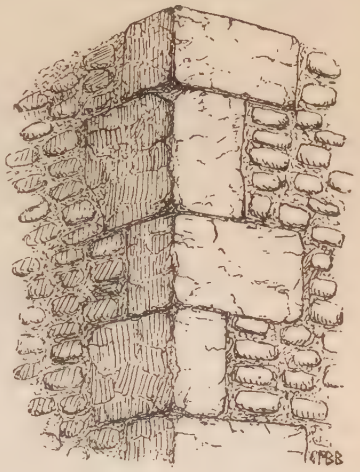


Fig. 33.—Quoin stones, south-west angle of south transept, Stow, Lincolnshire.

The most important point about the wall is the treatment of its corners. There are two characteristic Saxon methods of quoining, by the use of big stones and by what is termed long-and-short work. Great squared stones measuring a yard or more in their greatest dimension, massed one on the other and lending to the corner a rock-like solidity, are a feature found in some Saxon churches but not in later mediaeval work. Fig. 32 shows these big stones in the south-west quoin of the church of St. Mildred, Canterbury. The size of the lowest stone is 4 ft. in height by 2 ft. 8 in. in width and 1 ft. 5 in. in thickness. A more regular use of such stones is seen in Fig. 33 from the south-west corner of the southern transept at Stow, Lincolnshire. They are shaped somewhat like huge bricks and laid with their longest dimension along the southern and western walls in alternation. They run about 2 ft. to 1 ft. 6 in. in height.

Long-and-short work is the best known and most easily diagnosed of all Saxon symptoms. The following is the method of it. An upright pillar of stone, square in section and in

height varying from about 2 ft. to 4 ft., is placed at the angle of the structure, it may be that of the tower, the nave, the chancel, or the porch, and over it is laid a flat slab of stone which grips into the wall and shows the length of its sides along the two faces. The correct designation of the work when the whole of it is seen would be 'upright-and-flat' rather than long-and-short, but the latter term becomes appropriate when, as is often the case, the surface of the walls is plastered. With a view to plastering, which was a common perhaps a normal finish to Saxon walling, the wall-face was set back some half inch or so from the surface of the upright stones on the quoins and the plaster brought up flush with the edge of these. The parts of the flat slabs that lay along the walls were cut back level with the wall-faces and covered with the plaster so that only that portion of them was visible which corresponded with the width of the uprights. This portion was in height only the thickness of the slab and appeared 'short' in comparison with the 'long' upright pillars. Fig. 34 exhibits the technique in an example where the plaster has been stripped from the stonework. Were the plaster present the tailing of the flat piece into the wall would not be seen. This quoining is an excellent Saxon criterion for, so far as the writer's knowledge

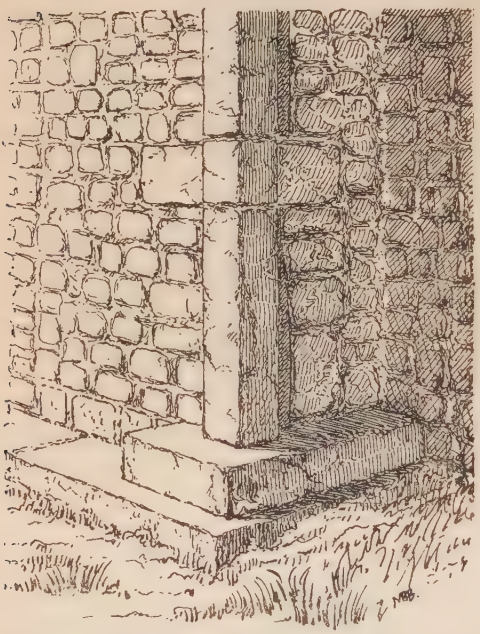


Fig. 34.—South-east quoin of nave at Wittering, Northants, showing long-and-short work.

goes, it is never used in Norman work in the Duchy or indeed anywhere on the Continent,[1] though there are occasional survivals of it in Norman work in England.

An equally significant feature and one that can be caught in a passing glance is the so-called pilaster strip. This must be carefully distinguished from the buttress. Saxon walls in general are unbuttressed, though the buttress occurs in three Kentish examples, St. Martin and St. Pancras, Canterbury, and Reculver; also in the enigmatical church of St. Peter-on-the-Wall, Essex, and round the apse at Brixworth. These buildings are all presumably early.

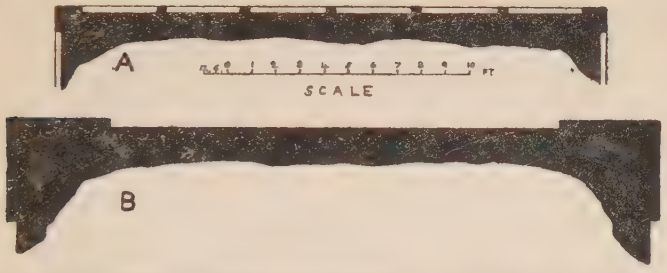


Fig. 35.—Comparison of Saxon pilaster strips at Earls Barton tower (A), with Early Norman corner buttresses at West Malling Church, Kent (B).

The buttress in various forms is common in Norman and later architecture, but its place in Saxon work is filled by the pilaster strip. The pilaster strip accords with the German Lisene in that it is not meant like the buttress to add strength to the wall. It is too narrow and too slight in projection for any purpose of the kind, but is simply a flat upright band of stonework varying in width from 4 in. to 1 ft. and running at intervals up the wall for the sake of decorative effect. The fact that the Saxon pilaster strip is sometimes found ascending a wall above the crown of an arched

[1] That is to say for quoins. There are instances in Germany, as, e.g. on the west front of St. Pantaleon at Cologne, where long-and-short technique is used for wall-pilasters, i.e. in the manner shown in Fig. 37.

doorway (see postea, p. 182) is conclusive proof that it has no constructive significance. The difference between the decorative pilaster strip and the strengthening buttress is seen by comparing in Fig. 35 the plan of the face of a Saxon tower A with that of the face of an Early Norman tower B. The flat, broad, clasping corner buttresses of the latter are as characteristically Norman as the narrow strips only about 4 in. in width of the former are characteristically Saxon. The sort of appearance presented by such strips can be seen in Fig. 36, which shows the south side of the nave at Woolbeding, near Midhurst, Sussex. The pilaster strips are irregularly spaced and are 7 in. wide. Such strips are at times, but not always, constructed in the long-and-short technique as shown in Fig. 37. The appearance of these features which should not be more than 10 in. or 1 ft. in width is the most certain test we possess that the piece of walling where they appear is of Saxon origin.

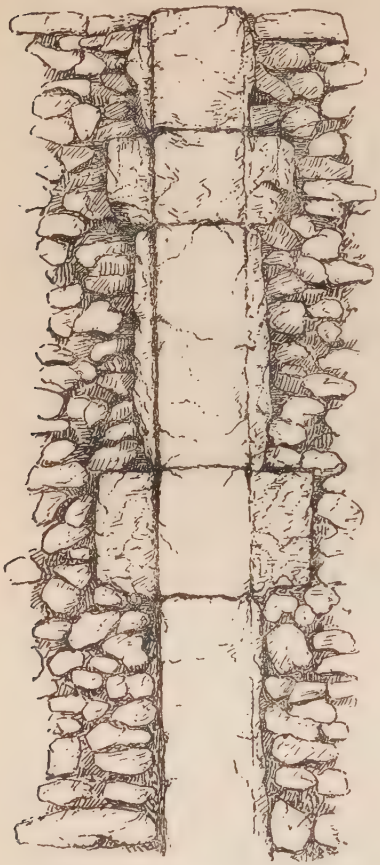


FIG. 37.—Pilaster strip, Breamore, Hants. The strips are about 11 in. wide.

A test on which much reliance may be placed is that of windows. A distinction may be drawn here between the wide openings common in belfries, and the narrower apertures for light in walls.

The Saxon belfry opening (see ante, p. 60 f.), which also occurs occasionally in the nave walls of pre-Norman churches,

FIG. 36.—Pilaster strips on the nave wall of Woolbeding Church, Sussex. The strips are about 7 in. in width.

(To face p. 90.)

is cut straight through the whole thickness of the wall, and it is subdivided generally into two.[1] The way in which the partition is managed is the point to note. Each half of the aperture is covered by a small round arch and between these a bit of the wall would be left suspended in the air were it not held beneath by a flat stone slab of sufficient area, that is itself sustained by a single prop in the form of a stone shaft that stands under the centre of it. The form of the shaft and of the cap which sometimes surmounts it are often worthy of remark. The former is sometimes that of a plain cylindrical column, sometimes it is octagonal, or square with rounded corners. It takes however occasionally the peculiar form of a baluster with a series of projections and hollows that appear as if formed on the lathe. The caps are either cubical or ionic of a debased form. Both shafts and caps will be studied on a subsequent page. It is the combination of the unrecessed openings, the flat slab called a through-stone, and the shaft called from its position a mid-wall shaft, that is the distinguishing mark which gives the whole structure a Saxon stamp. Such windows in the upper story of a tower and in the side wall of a nave are shown in Figs. 38 and 39.

Fig. 38.—Subdivided opening with baluster shaft in the tower of Barton-on-Humber, Lincolnshire. The splaying downwards of the sill is a later modification.

[1] There is one instance of a triple opening of the kind, though not in a belfry, at Brixworth, Northants, and the belfry openings in Earls Barton tower in the same county are fivefold. All others are double.

In regard to the narrower single apertures for light, a window with a very narrow external opening the rounded head of which is cut out of a single stone, and a very wide internal splay, is often pronounced Saxon whereas there is an

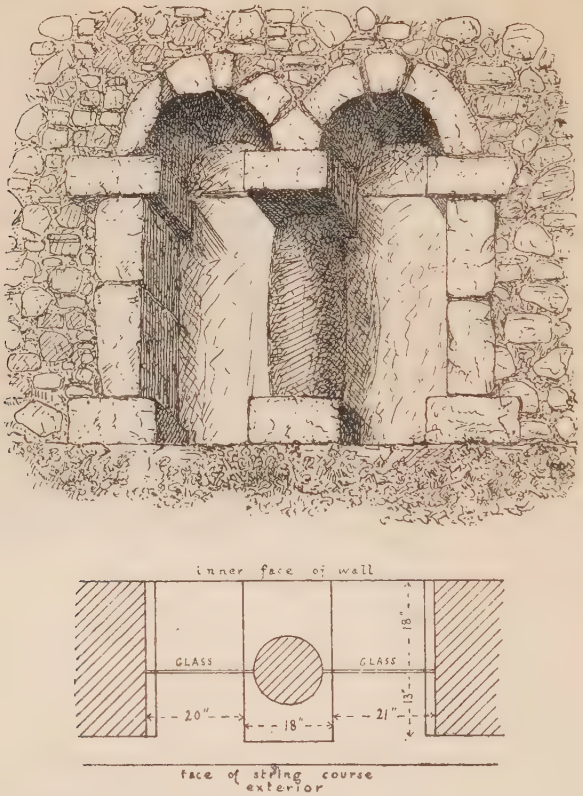


Fig. 39.—Window in north wall of nave, Worth, Sussex, with plan.

equal or greater likelihood that it is Norman. There are it is true Saxon windows of this general form, both early and late in the style (postea, p. 273), but the really characteristic Saxon light is one in which the narrow aperture is in the middle of the thickness of the wall and there is a splay on both sides (Fig. 40). These double-splayed windows may be either circular or of the upright round-headed shape, and the actual

opening for light is at times cut in a thin slab of stone or plank of wood built into the wall at the centre of its thickness. The plans of a few characteristic Saxon window openings with single and double splay are given in Fig. 41. Too much should not be made of flat heads to windows or doors (see postea, Figs. 65 and 66, p. 114), or heads made of stone slabs set up against each other at an angle, and forming what is sometimes called a straight-sided arch (Fig. 42). Heads of openings of the kind occur in Roman[1] and in Norman[2] work as well as in Saxon. On the other hand a peculiarity that suggests a Saxon date is the inclination of the jambs of door or window

Fig. 40.—Double-splayed Saxon window at Diddlebury Church, Shropshire. From a drawing by the late J. T. Irvine.

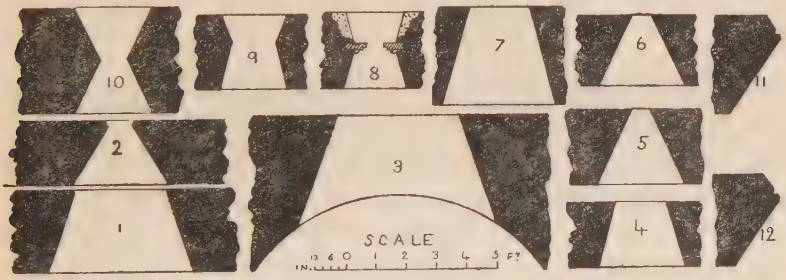


Fig. 41.—Comparative plans of window openings.

1. Clearstory at Brixworth.
2. St. Martin, Wareham.
3. Splayed Roman at Cilurnum on the North Tyne.
4. West Wall of Church, Monkwearmouth.
5. Killiney Church, Ireland.
6. Chancel at West Hampnett, Sussex.
7. Brixworth, east wall.
8. Boarhunt, Hants.
9. Barton-on-Humber, western adjunct.
10. Tower light, Howe, Norfolk.
11 and 12. Ledbury, Herefordshire, and Overbury, Worcestershire (not drawn to scale), of Norman date.

openings by which the aperture is made narrower above than below. This characteristic, which we have seen to occur in

[1] Baths of Caracalla.

[2] Jarrow, Durham.

Ireland, generally points to a pre-Conquest origin. An example from Brigstock church, Northamptonshire, is shown in Fig. 43.

The stranger who is interested in our early buildings, and is attracted by these external indications to enter the church, should notice the position and character of the doorways. It is characteristically Saxon to place these north and south, often

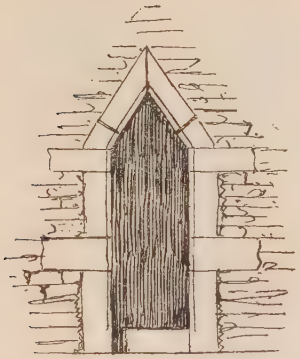


Fig. 42.—Opening in tower at Brigstock, Northants. From a drawing by the late J. T. Irvine.

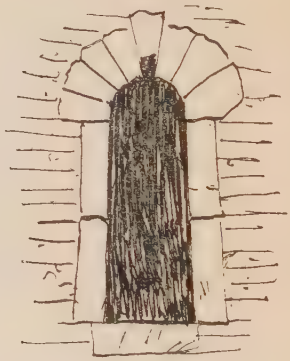


Fig. 43.—Window with sloping jambs, at Brigstock. Do.

just opposite each other, at the western end of the nave. One of them, generally the north, is now very commonly blocked. Narrow proportions in relation to height are Saxon. Fig. 44 shows a characteristic specimen.

In the interior of the edifice, if it be an aisled church, indications may often be found that the existing arcades have been cut through an earlier wall. The original windows of the aisleless nave may be partly preserved and it is worth while peering for the marks of their once external openings, on the aisle side of the wall of the nave between the arcade and the roof of the aisle. If the arcade be a Norman one the conclusion is sometimes drawn that the earlier wall must be Saxon. A good deal depends, however, upon the date of the Norman work, for it is quite possible that an Early Norman wall may have been cut

through in later Norman times, just as, to compare great things with small, the choir of Lanfranc at Canterbury was replaced within the Norman period by the grander structure of Ernulf. This question was posed by the late Professor Freeman in a paper on Iver church, Bucks,[1] where it was found that the wall above a Norman arcade of the first part of the twelfth century was of earlier date, and he regarded it as inherently possible that in the same wall there might be two periods of Norman work separated by no long interval of time.

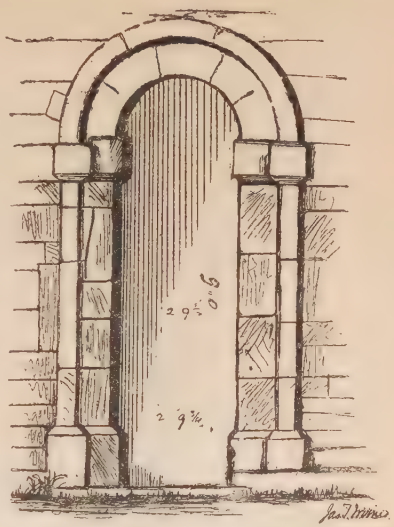


Fig. 44.—Saxon doorway at Diddlebury Church, Shropshire. From a sketch by the late J. T. Irvine.

Iver possesses the remains of some of the original windows of the once aisleless nave, now blocked and cut into by the later arcade (Fig. 45). The treatment of the window heads has been held to be proof of their Saxon origin, and they were so accepted by Professor Freeman. The manner in which the mouldings are stopped on the jamb, which itself is perfectly plain save for the roll on its edge, can however be paralleled so nearly in an Early Norman doorway at St. Nicholas, Caen, that Iver church has been excluded from the list of Saxon examples. It is unfortunately impossible to secure the plan of the jambs

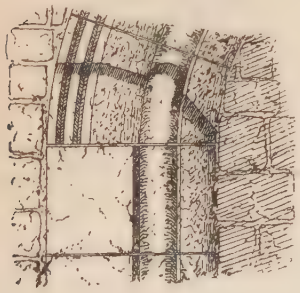


Fig. 45.—Blocked window, Early Norman or Saxon, in the nave of Iver Church, Bucks.

[1] *Archaeological Journal*, VII.

which might have settled the question. The window was probably not double-splayed, but one of the type of Nos. 11 and 12 in Fig. 41.

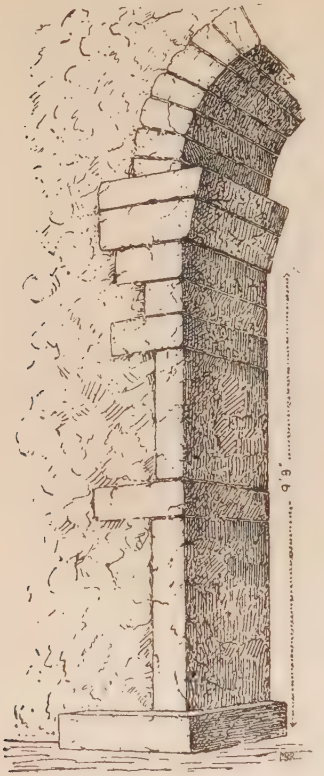


Fig. 46.—Tower arch, Market-Overton, Rutland. Saxon technique.

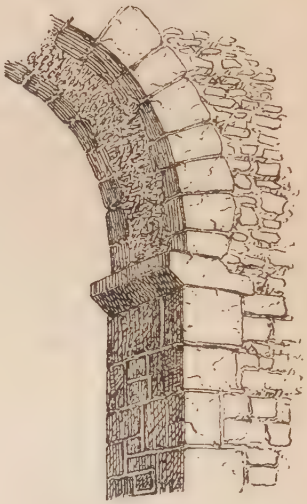


Fig. 47.—Chancel arch at Stainton-by-Tickhill, Yorks. Norman technique.

The principal features in which Saxon character may be expected to show itself in an interior are the tower and chancel arches. The first point to observe here is the masonry of the jambs and arch. If the stones of which these are composed run through the whole thickness of the wall there is every probability that the work is pre-Conquest, but if there be squared stones on the two faces of the wall with rubble filling in the middle, the probability is very greatly decreased. This

difference, which is one of no little significance, is illustrated by the arches placed together for contrast in Figs. 46 and 47. An arch built with through-stones as at Market Overton is certainly either Saxon or Roman ; one of the other kind, though more probably Norman, may yet be of pre-Conquest date.

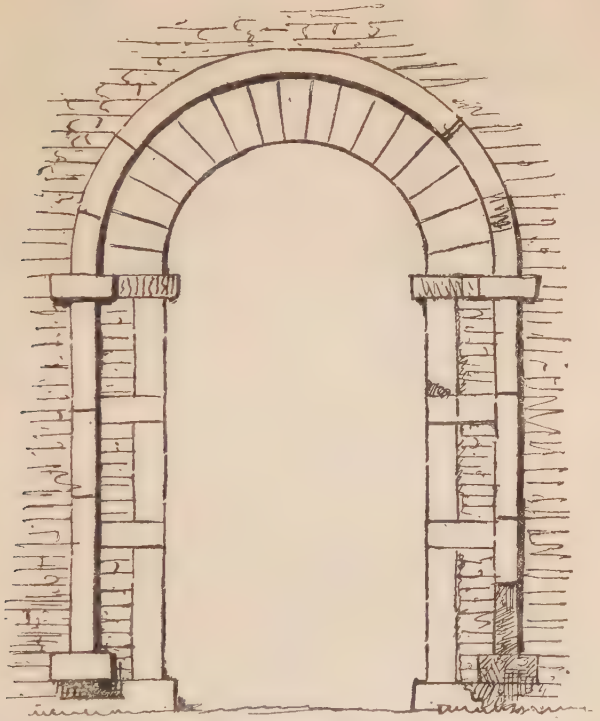


FIG. 48.—Tower arch, Brigstock, Northants, showing pilaster strips carried round the arch. The pilaster strips on each side start from projecting corbels. From a drawing by the late J. T. Irvine.

In this case observation should be made of the method of cutting the voussoirs of the archivolt, of the form of the imposts, and of the enrichment, if any exist, on one or both of the faces of the arch. The signs of ignorance or want of skill in shaping and fitting the wedge-shaped voussoirs, and a clumsy or a fantastic character in the imposts, are Saxon symptoms ; but the most significant feature, where it occurs, is the use for the

enrichment of the arch of pilaster strips like those on external

FIG. 49.—Jambs of western doorways.
A. Kirk Hammerton, Yorkshire. B. Kirkdale, Yorkshire.

walls. These flank the opening and are bent round above in the position of a hood moulding after the manner illustrated in Fig. 48. The projecting corbels from which they start at the bottom are noteworthy. This strip-work round openings is a very good criterion of Saxon origin. A recessed arch, and one with angle shafts, and with the edges of the openings worked into roll mouldings may be late Saxon but are more likely to be the work of Norman hands. A pair of Saxon recessed arches with the angle shaft is shown in Fig. 49 and the use of the roll moulding is illustrated in Fig. 50.

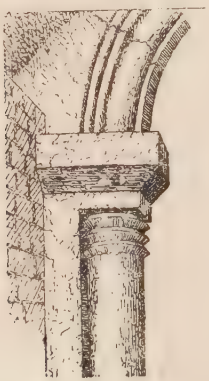


FIG. 50.—Portion of south door to nave at Stopham Church, Sussex.

CHAPTER IV.

THE TYPES AND FEATURES OF SAXON CHURCHES.

From these preliminary questions about the number, distribution, and criteria of Saxon churches, we may now pass to an analysis of the various types which they present from the simpler to the more complex. What is aimed at here is chiefly description. The object in view is to put the reader in possession of the main facts concerning the plan, the general form, and the details of the most characteristic examples of Saxon ecclesiastical architecture. Discussions of continental affinities and comparative dates are for the most part reserved for a subsequent chapter. It is proposed to perambulate the Districts shown on the map and to describe whatever is of special interest in each,[1] but, in order to present as full a view as possible of the subject, each type in succession will be followed over the country wherever it presents itself in a characteristic example. This will give an idea whether the type is a rare or a common one and will exhibit the geographical limits of its distribution.

By following the subjoined order we shall have the opportunity of passing in review the principal types of Saxon churches as well as the larger parts and features which distinguish them.

[1] Only a limited number of the examples on the map are discussed in the text. A full list, with a brief indication of what appears in each, will be found at the end of the volume.

There will be noticed then

i. The plain rectangular oratory without chancel.
ii. The same with rectangular chancel.
iii. The same with apsidal presbytery.
iv. The oratory with space screened off before the apse.
v. The western or lateral porch.
vi. The lateral chapel.
vii. The western tower.
viii. The tower forming the body of a church.
ix. Axial towers.
x. Central towers, transepts, and the cruciform plan.
xi. Churches with both a central and a western tower.
xii. The twin-towered façade.
xiii. The triple-apsed plan.
xiv. Aisled churches.
xv. Crypts.

I. The Plain Rectangular Oratory without Chancel.

The simplest type of church that England has to show is the oblong interior without divisions, a form familiar as we have seen to Irish traditions and represented by existing remains in all the Celtic districts of the British Isles. Apart from some instances in Cornwall that are certainly not Saxon,[1] the writer knows only one example in the English counties that is of assured pre-Conquest date, and there is some doubt even about this whether it is Saxon and not rather a specimen of Irish handiwork. The building in question is the so-called chapel of St. Patrick upon a promontory of the Lancashire coast at Heysham on Morecambe Bay. It stands in a ruined condition on a rocky table a few yards west of the parish church of

[1] Of Cornish examples the best known is the oratory of St. Piran on the sand dunes a couple of miles north east from Perranporth. It measures internally 25 ft. by 12 ft. The principal door was on the south and there was a smaller one in the east wall.

Heysham which is itself in part of Saxon date, and has in front of it a small sanctuary used in mediæval times as a place of burial. Could we be sure that the marks of interment go back to pre-Conquest times it could be claimed as an example of the ecclesiola or capella cum coemiterio referred to in the previous volume.[1] The plan of the chapel is shown in Fig. 51 in con-

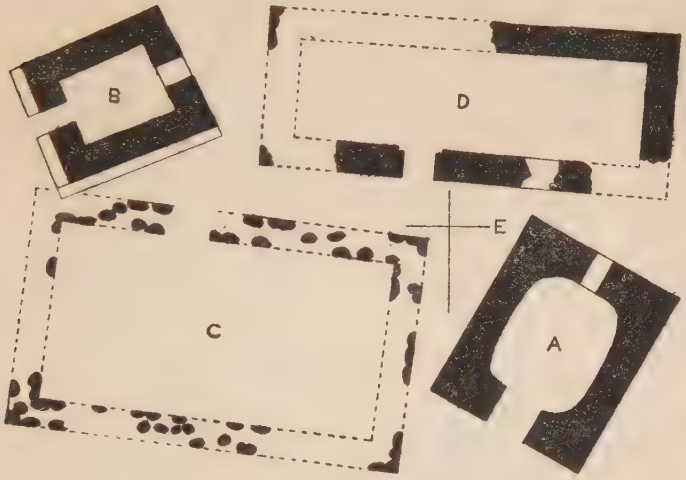


FIG. 51.—Plans of single-celled oratories.

A. Oratory on Skellig Michael, rounded within but square outside.
B. Rectangular Oratory on Skellig Michael. See Fig. 9 ante, p. 22.
C. Foundations of rectangular Oratory near Aber, North Wales. See *The Builder*, Oct. 2, 1897, p. 252.
D. Heysham Chapel, Lancashire.

nection with one or two plans of characteristic Celtic single-celled oratories of the same type, with which it may be compared. It exhibits great length in proportion to the width,

[1] Vol. I, p. 311, and Fig. 25. A pre-Conquest date has been claimed for the graves hollowed in the rock to the west of the chapel, on the supposition that some marks on the flat stone to the north of the northernmost of the cavities are the remains of an ornamental pattern of interlaced work similar to that on pre-Conquest stone crosses. As a fact these are only pick marks made when the surface of the stone was dressed flat. Marks exactly similar can be seen on the walls of the square sinkings where the head-stones stood.

the internal dimensions being about 27 ft. in length by a width that varies from nearly 9 ft. to less than 8 ft. The wall is about 2 ft. 5 in. thick. There is no trace of an altar and no

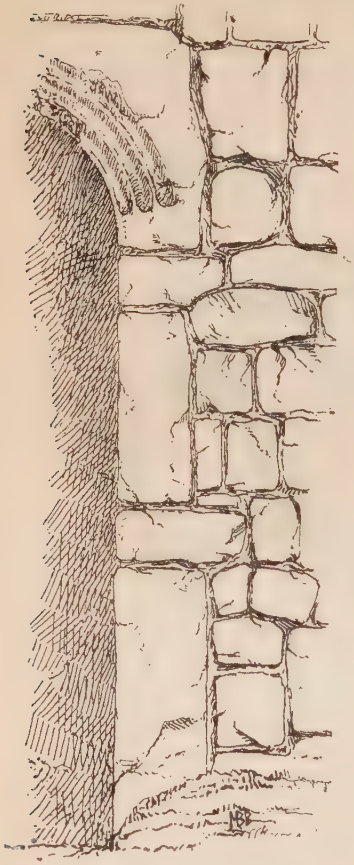


Fig. 52.—South doorway of the Chapel of St. Patrick, Heysham, Lancashire.

Fig. 53.—Doorway in north wall of nave, Somerford Keynes, Wilts.

sign of a window in the east gable which is well preserved, but the marks of one are visible in the south wall. The only features to be noted are, first, a curious projecting stone at the base of the east gable on the north side, that may be compared with the Irish stone of similar form shown in Fig. 17, ante, p. 31, and the south doorway, the scheme of which

is given in Fig. 52. It will be seen how the stones are arranged in the jambs. Upright slabs which go through the whole thickness of the wall alternate with smaller slabs laid horizontally. The head of the doorway is cut out of a single stone and is enriched with hollow flutings. There is a somewhat close parallel to this ruined doorway in a Saxon one better preserved, but blocked, in the north wall of the church of Somerford Keynes in Wiltshire, shown in Fig. 53. The mouldings in the latter case project and are ornamented with a cable pattern, but otherwise the two correspond so nearly that we are inclined to claim for the building at Heysham a Saxon rather than an Irish origin.

There is a peculiarity about this doorway at Heysham chapel that can be discerned on the plan, D, Fig. 51. The jambs have a shallow rebate on their internal face for a door, and this in Saxon work is extremely rare. As a general rule the doorways are cut straight through the wall and the door shut flat across the inner aperture. The doorway at Diddlebury shown in Fig. 44, ante, p. 95, still preserves on the inner face the iron hooks on which the door was suspended across the opening. The doorways of early date at Brixworth, St. Pancras, Canterbury, and of a late epoch at Barnack, Earls Barton and Barton-on-Humber, with very many others, are planned in this fashion, but it is not the case that all Saxon door openings are thus treated. At Monkwearmouth porch the north and south doorways are rebated for doors opening outwards from the porch (see plan, Fig. 78, postea, p. 141) and the feature here is unquestionably original. The north door of the nave at Escomb has also a rebate, and so probably had the two other doors of the church. (See plans, Figs. 66 and 62, postea, pp. 114, 110.) At Reculver, the original and very early doorway into the space before the apse has the jambs in the interior cut into a shallow rebate 2 in. in depth by a length along the wall of 6 in.

II. The Oratory with Rectangular Chancel.

The succeeding types exhibit a distinct sanctuary added to the original oblong which now becomes the nave. When the sanctuary is of rectangular form we have a type which is familiar in Ireland and in Scotland and is among those most commonly represented in the Saxon monuments of our own country. The following are some characteristic examples from the different districts. In District I Whitfield, near Dover, Kent, presents to us, as the core of an extended and modernized building, a small nave and chancel church of the

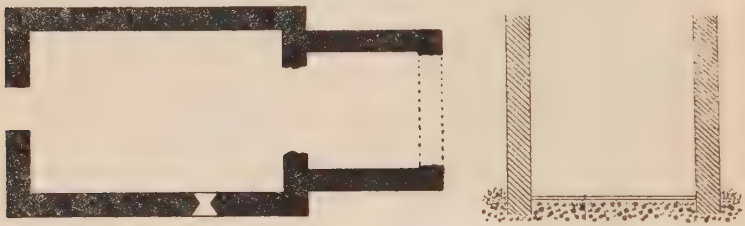


Fig. 54.—Plan, and section of nave, of Whitfield Church, near Dover, Kent.

plan and section shown in Fig. 54. The chancel arch has been widened in modern times. We note the minute dimensions of the chancel, only 9 ft. from west to east, and the great proportionate height of the side walls. These are 2 ft. thick in the nave but in the chancel only 1 ft. 9 in. In the south wall of the nave is a small original window more than 10 ft. above the floor the aperture of which, 8 in. across, is in the middle of the thickness of the wall, while the jambs are splayed out towards either face, to an opening of about 2 ft. 3 in. in total width. These double-splayed windows we shall constantly meet with as we proceed in our review.

One of the most complete Saxon churches of this type is Boarhunt in Hampshire. The plan is given in Fig. 55 and a general view of the exterior in Fig. 57 which shows that

unlike the last example the walls are by no means of abnormal height. The chief peculiarity of the plan is the former existence

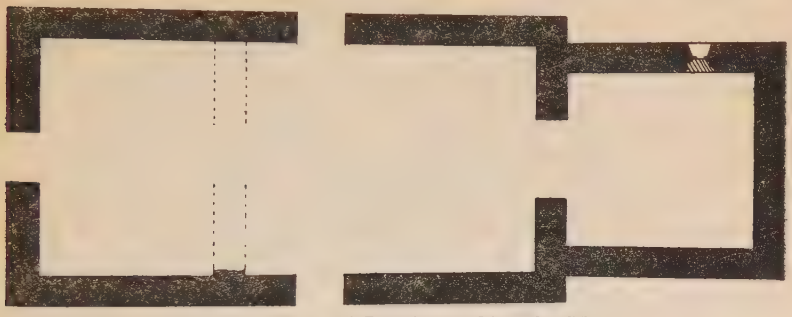


Fig. 55.—Plan of Boarhunt Church, Hants.

of a cross-wall cutting off a portion of the western end of the nave, after a fashion observed also at the Saxon church at Daglingworth in Gloucestershire. Of features there are to be noted, first, the double-splayed north window of the chancel. Here the aperture is cut in a mid-wall slab set in the centre of the thickness of the masonry, and as will be seen in Fig. 56 this has round it just where it is set in the wall a carved moulding of the cable pattern, that is commonly used in this country in work that is of Roman of Saxon of Norman and apparently also of comparatively modern [1] date. Interesting peculiarities are the marks of staples on

Fig. 56.—Window in chancel at Boarhunt Church, Hants. From a drawing by the late J. T. Irvine.

[1] Cable moulding occurs on the imposts of the chancel arch in Heysham parish church, where it is most probably seventeenth century work.

the jamb where hung in old times the shutter which was the only means of closing up the aperture. There is a rebate round the opening into which this shutter fitted, and this becomes a splay above to admit of the easy action of the shutter. Another feature of interest is the chancel arch, but the character this shows is better represented in other examples. The old north and south doors are blocked.

It will be noticed in the general view of the church that a pilaster strip runs up into the central point of the gable on its eastern face. This feature is sufficiently peculiar to make it probable that all examples of it will be of about the same date. Now it occurred in the western gable of the church at Kirkdale near Kirby Moorside in Yorkshire,[1] where is to be seen the lapidary inscription noticed in the previous volume[2] which gives the date of the building at about the year 1060. The date of Kirkdale being known, we can in this manner arrive at a pretty sure approximate date for Boarhunt and for other churches with the same peculiarity, as well as (with more chronological latitude) for the use of pilaster strips in general. These pilaster strips, it may be remarked, are very common in the Saxon churches of Hampshire and of Sussex and Surrey as far east as the longitude of Brighton, but are not found in Kent. They are abundant in the midland districts but less common in the north. The illustrations that follow will show a considerable number of examples in various parts.

Resuming the consideration of the nave and chancel type, and passing on to District II, we find at St. Martin, Wareham, Dorset, a church also in all essentials complete, though the original plan has received additions on the north and

[1] The feature is now destroyed owing to the fact that in 1827 the western gable was lowered and a tower built up against it. It is however distinctly shown in a drawing of 1821 published by C. L. R. Tudor, *Kirkdale Church*, Lond. 1876.

[2] Vol. I, p. 356 and Fig. 27.

FIG. 57.—Boarhunt, Hants, from south-east.

(To face p. 106.)

Harvard University

west. The building, which stands on the earlier Saxon ramparts of the town, is picturesque in outline, and shows long-and-short work at the quoins. In contrast to Boarhunt, Woolbeding, and the group of churches round Winchester, which are of low proportions, St. Martin has the lofty walls which on the whole are a pre-Conquest characteristic.

The Midland District IV contributes the Northamptonshire example of Wittering. Only the nave and chancel are Saxon, the north aisle and the western tower and spire being later additions. The church, of which the plan is

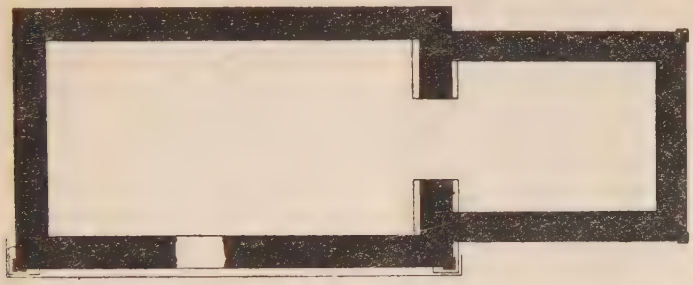


Fig. 58.—Plan of Wittering Church, Northants.

given in Fig. 58, stands on high ground quite away from the present village and is a conspicuous object on the left of the Great North Road as we follow its course towards Stamford. Wittering exhibits careful long-and-short work at the four quoins of the nave and the two of the chancel, see Fig. 34, ante, p. 88, and though no original openings are preserved it retains a chancel arch that is one of the best specimens of the style. The arch has a height of 14 ft. 6 in. to the crown with a width between the jambs of about 7 ft. Fig. 59 gives a view of the northern jamb from the west, together with its plan. The impost of heavy trapezoidal form takes the eye at once as something quite unlike what the Norman and later mediaeval styles have to show. It is composed of several pieces, the front part being formed of two superimposed slabs each measuring 4 ft.

from west to east by a depth of 2 ft. 6 in. and a thickness of about 9 in. They are carried on a jamb that is set back 6 in. from the face of the impost and the plinth below so as to allow space for a half-round soffit shaft and half-round shafts on the west and east faces, to which correspond roll mouldings round the arch above. Further out than these there is a square strip like an external pilaster strip which is bent round above to form an outer order. The timid suggestion of bases and caps is very characteristic of Saxon work. The imposts of the tower arch at Market Overton, Rutland, Fig. 46, ante, p. 96, are of similar character but the jambs there are quite plain though composed in orthodox Saxon fashion of through-stones.

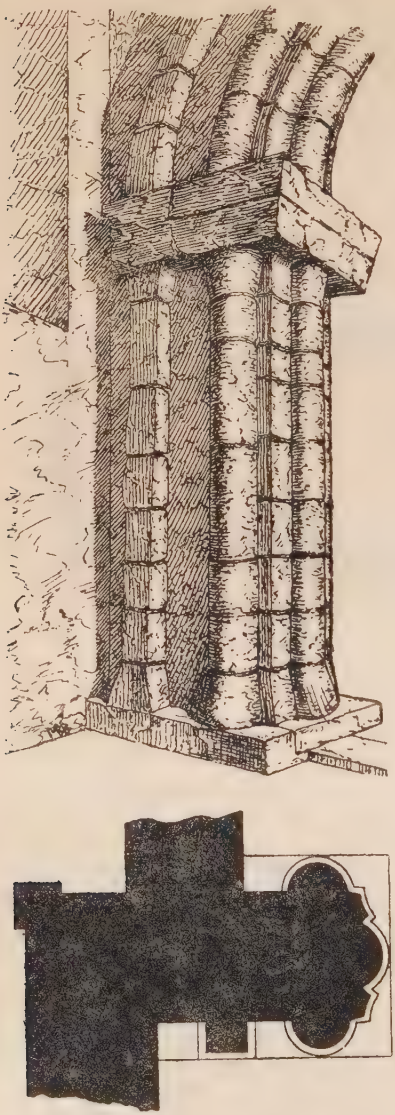


Fig. 59.—View and plan of northern jamb of chancel arch, Wittering, Northants. Scale of plan ¼ in. to 1 ft.

There exists a fair number of examples of imposts of chancel arches ornamentally treated. Some specimens of these will be noticed on a later page in connection with carved capitals.

It is worth while to pause a moment at this chancel arch of Wittering,

FIG. 61.—View of Deerhurst Chapel, with the house in which it was incorporated.

To face p. 109.)

for though in some respects it is exceptional, in others it represents a type, specimens of which recur constantly in pre-Conquest work. It is a Saxon scheme to set three half columns on the jamb, one as a soffit shaft and the others on the western and eastern faces, these last two being sometimes, as at Bosham, Sussex, recessed to receive the columns as angle-shafts. The simpler scheme, without recessing or only with what looks like the beginning of recessing, is well represented at Clayton, near Brighton (Fig. 60). There are here no bases or caps, which at Wittering appear in embryo and in other examples are fully developed. As a sort of outer order a square pilaster strip, as at Wittering, is not uncommon, and this occurs in many examples such as the famous tower arch at Stow, Lincolnshire, the tower arch at Skipwith, Yorks; Barnack; St. Benet, Cambridge, etc. Rolls and square mouldings round the arch generally correspond to the half-columns and strips below. It is a Saxon peculiarity however that these latter do not always spring from a solid plinth as at Wittering, but from projecting corbels, by which they are held as it were suspended a few feet above the ground. Stow is a marked example, but the peculiarity is well seen also in the archway at Brigstock shown in Fig. 48, ante, p. 97.

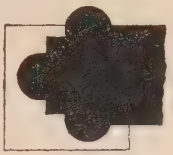


Fig. 60. — Jamb of chancel arch, Clayton, Sussex. Scale $\frac{1}{4}$ in. to 1 ft.

In District V the Gloucestershire example of Coln Rogers, near the Fosse Way a few miles north-east from Cirencester, is also complete. Deerhurst Chapel, though it has lost its original eastern termination, is too interesting an example to be passed over. Deerhurst, near the Severn, eight miles north of Gloucester, has been referred to as one of the two places in England that still possess a pre-Conquest chapel in the same village as a partly Saxon parish church. In the year 1675 there was discovered at Deerhurst an inscribed stone, now preserved at Oxford, that records the dedication

by Earl Odda of what he calls a 'royal hall,' by which we may understand a 'basilica' or church, at a date in Edward the Confessor's reign that corresponds with April 12, 1056.[1] This was formerly supposed to refer to the priory church of St. Mary, now the parish church, itself a Saxon building of exceptional value, but in 1885 the discovery was made of a small Saxon chapel incorporated in the fabric of an old mansion, now a farm-house, and it is recognized that the inscription, which was actually found close to this house, refers to the chapel, the date and character of which are accordingly fixed. The building is still attached at its eastern end to the farm-house as shown in Fig. 61. It has double-splayed lights, the late date of which feature is thereby indicated.

Fig. 62.—Plan of Escomb Church, Durham.

For the North, the remarkable example of Escomb, Durham, in District VIII will suffice to show the even diffusion of this type over the country at large. Escomb is by far the most interesting of all the specimens of this form of church, and is one of the half-dozen or so of extant buildings to which an early date in the Saxon period can confidently be assigned. The plan, Fig. 62, shows a nave of remarkable length in

[1] The inscription runs as follows (see *Archaeologia*, L, 70):—Odda Dux jussit hanc regiam aulam construi atque dedicari in honore S. Trinitatis pro anima germani sui Ælfrici que de hoc loco asūpta. Ealdredus vero Epȳs qui eandem dedicavit 11 Idibus Apl. xiiii aute annos regni Eadwardi Regis Anglorū. The fabric would be properly described as a votive or memorial oratory. Its size and relation to the main church of the place are suitably expressed by the term 'chapel.'

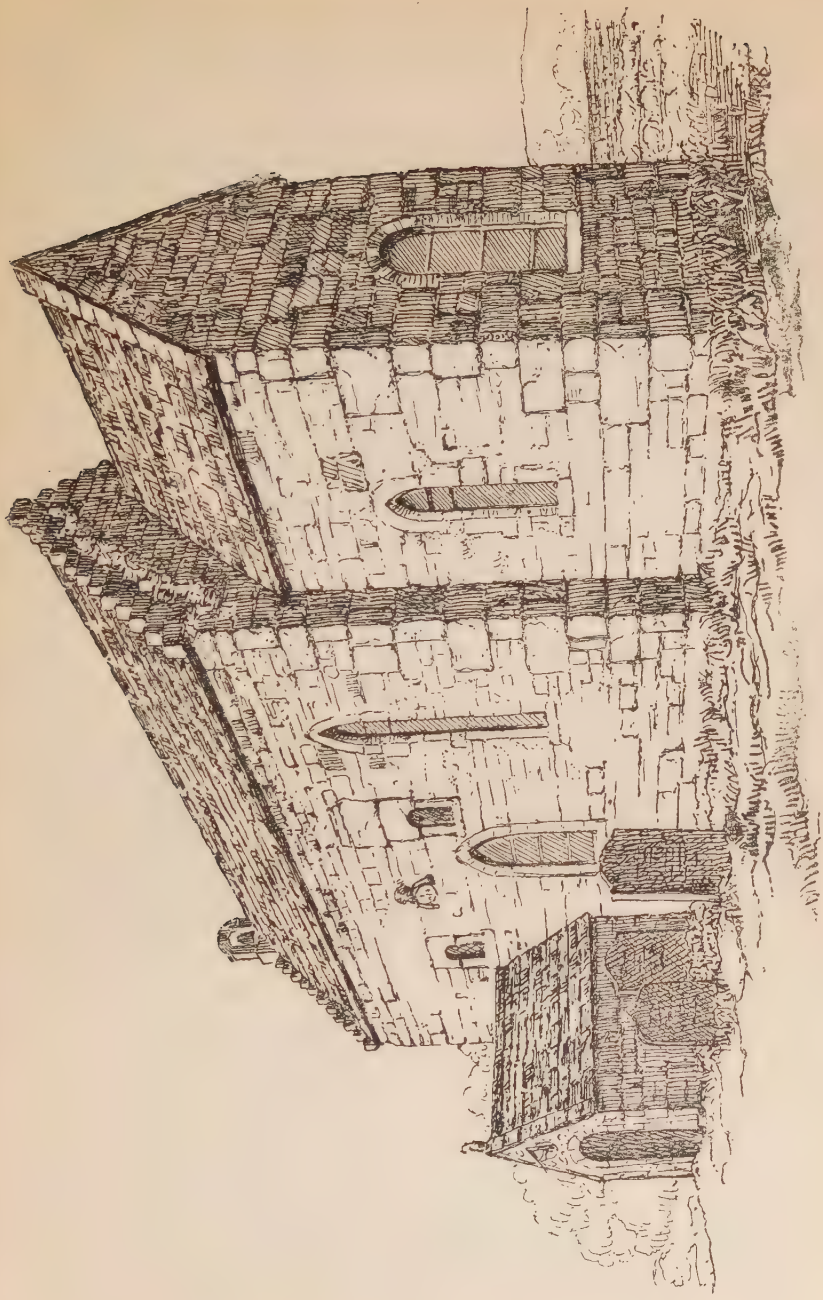


Fig. 63.—Escomb Church, Durham, from south-east.

proportion to its width, while the view indicates that the height of the nave walls is similarly marked. The gable is also sharply pointed. The exterior view from the south-east, Fig. 63, will enable a judgment to be formed of the technique. The walls which are 2 ft. 3 in. or 4 in. thick[1] are constructed for the most part of squared stones of ample size, many of which show by their tooling or other marks upon them that they are Roman stones brought from a neighbouring station of the legions.[2] Blocks of a specially large size are used for the quoins and some of these are 1 ft. 6 in. to 2 feet in height by 3 ft. to 4 ft. in length. Notice should be taken of the manner in which they are laid. They are set up on edge and extend like slabs along the wall alternately north and south and east and west as do the quoin-stones at Stow illustrated in Fig. 33, ante, p. 87. There is no trace of the technique of long-and-short work. On the other hand this meets us as soon as we enter the building (Fig. 64), in the imposing and characteristic feature of the chancel arch. This measures 15 ft. in height by a width of 5 ft. 3 in. and is constructed of large stones that all go through the whole thickness of the wall and are carefully squared or cut to the wedge-shaped voussoir form. The jambs are fashioned like those at Heysham or Somerford Keynes of slabs alternately upright and flat. The imposts are chamfered and the impost-stone on the south is thicker than the other, so that a portion of the jamb is cut in the same stone below the chamfer. A glance at the Roman door jamb in Fig. 1, ante, p. 4, will reveal the same peculiarity.

Next in order may be noticed the two ancient doorways surmounted by flat lintels. They are both in the north walls, one, now built up, in that of the chancel and the other, shown

[1] The walls are said to batter as they rise, i.e. to be thinner at the top. They are certainly not quite plumb, and only careful measurement, which now would be hardly practicable, could decide if they really taper.

[2] Probably from the Roman station of Vinovium now Binchester.

in Figs. 65 and 66, in the wall of the nave. The jambs, it will be noticed, are constructed like those of the chancel arch. There is however the further peculiarity which we meet with

Fig. 64.—Interior view of Escomb Church, Durham.

here for the first time, that the jambs are slightly inclined so that the doorway measures 3 ft. in width above, but 3 ft. 3 in. below. This north opening it must be observed is rebated for a wooden door, which was kept closed by the common device of the wooden bar that played into a recess in the stonework of

the jamb. On the outside we find the curious arrangement that the flat lintel and the jambs are mortised into each other after a fashion that reminds us of the Roman gateway shown in Fig. 2, ante, p. 5. A similar peculiarity will meet us at Britford near Salisbury. Besides these two north doorways the present south doorway of the nave is an original opening though it has been altered in modern times. Part of the

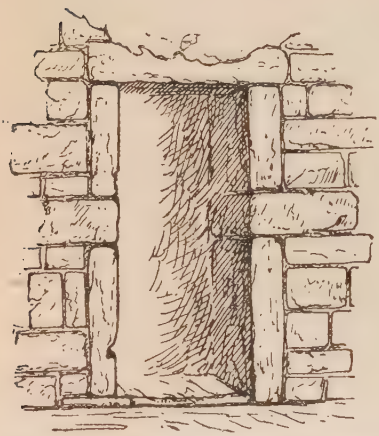


Fig. 65.—North doorway of nave, Escomb, interior view.

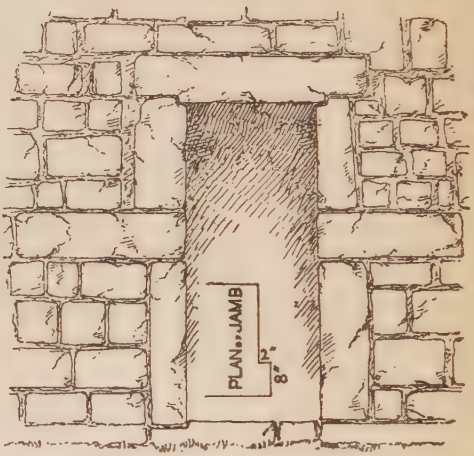


Fig. 66.—North doorway of nave, Escomb, exterior view.

east jamb is ancient. It must be remarked that the north and south doors are not opposite each other, though this symmetrical arrangement is commonly found.

The small original lights on both sides of the nave are noteworthy, Figs. 67-8. The two on the north are flat-headed but the southern pair have round heads cut out of single stones, or rather out of two single stones set one behind the other to make up the thickness of the wall. The innermost lintel of the south-east window is fully 7 ft. in length. Both windows are internally splayed and have markedly sloping jambs. The aperture is in each case on the outer face of the wall and measures some 2 ft. 8 in. by 1 ft. 5 in. The internal opening is about 5 ft. high by a mean of about

2 ft. 7 in. in width. The groove for a shutter is visible on the jambs of the round-headed light. No original openings are preserved in the chancel but there is one high up in the west gable of the nave.

There are remains of old, possibly original, plastering on parts of the walling of the church, and a bit of pebble flooring in the north-west corner. On the exterior, on

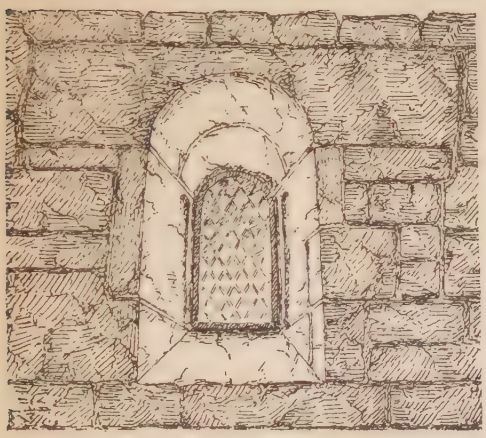


Fig. 67.—Round-headed window internally splayed, south side of nave, Escomb.

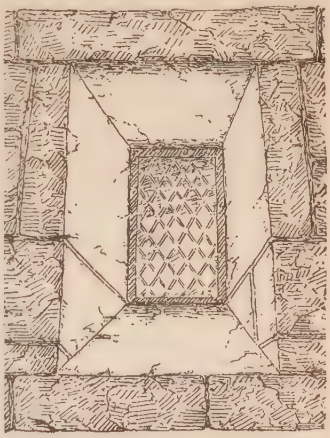


Fig. 68.—Square-headed window, north side of nave, Escomb.

the south wall of the nave is a mutilated Saxon sundial with a curious monster, half serpent and half fish, curling round it.

The modern history of the wonderful little church is a curious one. It had apparently been always in use till 1863 when a new church was built a little way off on the higher ground, and the old building, the value of which no one seems to have suspected, was allowed to fall into decay. In 1879 attention was for the first time directed to it from the archaeological standpoint and its antiquity and interest were at once recognized. It was properly repaired and is still in use for occasional services for the population of what is now a mining village.

III. The Oratory with Apsidal Presbytery.

The next type consists in a single oblong chamber with a sanctuary not square but apsidal. Nearly all the examples of this aisleless apsidal type that are known to exist are in Kent, but it does not follow that they were not extant at one time in other parts of the country. The example which we will take first to illustrate the type is a building with which some historical difficulties are connected. It is near Bradwell in Essex and is known as St. Peter-on-the-Wall, from the fact that it is actually built on the site of the principal gateway of the Roman fortress of Othona (see the map of Roman Britain, Vol. 1, Fig. 5, p. 52). This was called in Bede's time Ythancaester, and here as the historian tells us Cedd, the apostle of the East Saxons, about 653 A.D. built for himself a mission station.[1] There is now to be seen on the site a desecrated structure that has many of the characteristics of an Early Saxon church, though it is not exactly of the kind that Cedd would have built, nor is it placed where at Cedd's time such a church would naturally be located. The form is apsidal, and the apse belongs to Roman building traditions, not to those of the Celtic Church of which Cedd was an alumnus; moreover the custom of the time was to place Christian churches and mission stations within the protecting lines of Roman forts, a course adopted by Fursa in East Anglia,[2] and not to level the walls of these and build on the top of them, as has been done at St. Peter-on-the-Wall. Hence it has not been without con-

[1] Vol. 1, pp. 172 and 201. Othona and the building under consideration form part of the subject of a paper by Th. Lewin in *Archaeologia*, XLI, 421 f. See also *Archaeological Journal*, LVIII.

[2] Vol. 1, p. 201.

siderable misgiving that the writer has yielded to the impression made upon him by the interesting monument and has included it in this survey.

The description of the building which is now used as a barn is easy. The plan shows an oblong cella laid out with far more accuracy than is generally the case with Saxon work and measuring internally 49 ft. 8 in. by 21 ft. 8 in. This was terminated to the east by a semicircular apse now destroyed. The walls 2 ft. 4 in. in thickness are chiefly composed of Roman materials, both brick and stone, and exhibit the uncommon feature of buttresses, of which four strengthen the two western quoins and four others abut the north and south walls. One on the south side is well preserved and is 2 ft. on the face with a projection of 1 ft. 10 in. At a height of some 12 ft. they end with sloping heads. These buttresses are in part at any rate in bond with the wall, as can be seen, e.g., in the fragment of the easternmost one on the south side. In one place a large stone is partly in the wall and partly in a buttress and is cut to the angle formed by the two faces. There was a west door and apparently a porch in front of this. Five windows, though considerably battered, have left their traces, two in each of the long walls and one high up in the west gable. They are internally splayed from an aperture of about 3 ft. in width to an inner spread of about 5 ft.

In place of the normal 'Arch of Triumph' which we should expect to find opening towards the apse there were smaller arches, apparently three in number, the northernmost of which is preserved for a space covered by twenty two of the Roman bricks of which it is composed. The arch is set back an inch or two on its jamb. This peculiarity, of an arcade in place of a single arch between nave and presbytery, will be noticed later on.

On the eastern side of this arcade the line of the nave wall is extended on the south for about 4 in. where, in the lower part, it ends with a smooth face that seems to indicate a doorway. Mr. Lewin stated that there was here on the north a sacristry or vestry, of which the foundations were found by excavation.[1] On the south the corresponding wall runs in a straight line for 4 ft. or so, so that the curve of the apse did not begin for some little distance beyond the arcade. This 'stilting' of the semicircle of the apse, for so it may be termed, is found in many Early Christian churches, and is specially well represented in those of North Africa and Syria.[2]

There are so many features about the structure that betoken an early date that it is impossible not to include it in this survey. The better known Kentish examples may now receive attention.

The old church at Lyminge in Kent, already referred to (Vol. 1, p. 279), the foundations of which are to be seen immediately to the south of the present parish church, was of this plan and measured 32 ft. by 17 ft. 3 in. in the nave, with a semicircular apse 14 ft. 6 in. in diameter; and of this plan too was the early Saxon church at Rochester,

[1] *Archaeologia*, loc. cit. p. 448.

[2] As this is the first introduction in this survey of the apsidal termination, it may be noted that existing remains or traces of ten Saxon apses show the following variations in plan: Lyminge, Reculver, St. Peter-on-the-Wall, Deerhurst, and Worth are semicircular; Rochester, Lindisfarne, and probably St. Pancras, semi-elliptical; Brixworth is rounded internally but on the exterior polygonal; Wing polygonal inside and out. The form in which the apse is made up square on the exterior, a variation not uncommon in the Early Christian churches of North Africa and of the East, does not occur in extant Saxon work. Some excavations begun in 1901 at Much Wenlock, Shropshire, on the site of a conventual settlement of the seventh century, seemed to show indications of a building of this form, but they have not yet been carried far enough to settle the question. The use of the apse in general in our early churches will form the subject of a paragraph in a later chapter. (See postea, p. 279 f.)

the outline of which has recently been recovered by excavation (Fig. 69).[1]

Rochester is fully discussed and illustrated by the Rev. Grevile M. Livett and Mr. St. John Hope in *Archaeologia Cantiana*, Vols. XVIII and XXIII, and the accounts make it clear that the remains represent a Saxon church of repute, which may very well have been the first bishop's church on the site, dating from the year 604 A.D. The nave of this church measures 42 ft. by 28 ft. 6 in., the

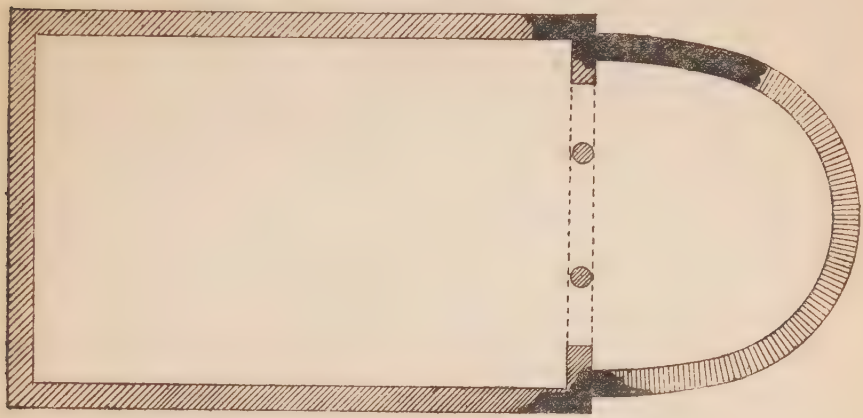


FIG. 69.—Plan of early Saxon church at Rochester.

apse has a diameter of 24 ft. 6 in. by a depth of 19 ft., exhibiting thus the form of a half ellipse rather than a semicircle.

The most interesting, because possibly the earliest, example of the plan under consideration occurs in connection with a building the architectural history of which is obscure, but which is quite the most famous parish church in the whole of England. The reference is to the church of St. Martin by Canterbury, mentioned by name by Bede and associated with the first introduction of Christianity into Saxon England.

[1] The writer is indebted to Mr. St. John Hope for permission to reproduce this plan. The dimensions given for Lyminge are taken from Mr. Hope's paper.

It consists now in a square western tower, nave, and long square-ended chancel, and the nave and the western part of the chancel are clearly of pre-Conquest date. There is some evidence, discussed in detail in a recent work on the church by Canon Routledge,[1] that this western part of the chancel was the original church. It is supposed to have terminated towards the east in an apse and to have extended westwards into the part which is now the nave so as to form in this way a plain round-ended chapel. Later additions and alterations brought the church to its present shape as shown in the

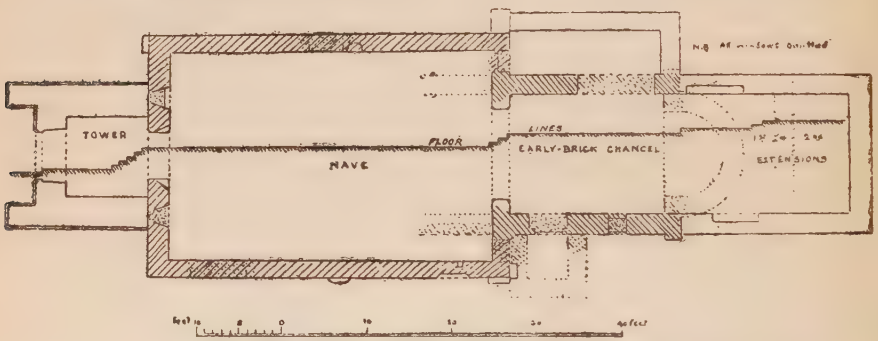


FIG. 70.—Plan of St. Martin, Canterbury, showing supposed original form of the church in the present chancel. (Special scale.)

plan, Fig. 70. In this plan, the work of the Rev. Grevile M. Livett, which is here copied with the kind permission of Canon Routledge from his book, the supposed original nucleus of the structure is sufficiently indicated, and an examination of the building in its existing condition demonstrates the high antiquity of the western part of the chancel.

The present south wall of this, 2 ft. 2 in. thick, is composed almost entirely of Roman brick laid with fair regularity. About half-way along the present extended chancel wall there is a projecting buttress of the same material (now a good deal modernized) and immediately to the east of this

[1] *The Church of St. Martin, Canterbury.* London, 1898.

there is a straight joint in the brickwork showing where the original chapel ended. Of the two doorways, now blocked, in this wall, the round-headed one is a later insertion and has sloping jambs with an arch head wider than the jambs. The flat-headed one at the south-west corner is probably original, and may have given access to a small lateral chapel. The eastern part of the present chancel is much later. On account of the disturbances caused by interments within the chancel it has been impossible to ascertain decisively whether or not the original chancel really ended apsidally, though this is rendered highly probable by the treatment of the south-east corner where there is the buttress on the south but none on the east, though there would have been one here also had the chancel ended in a straight eastern wall.[1]

The nave of St. Martin is also Saxon, or at any rate pre-Conquest,[2] but the walls of it are of ruder construction than those of the chancel, though they exhibit very distinct survivals of Roman technique. One of these consists in a patch of red plastering, visible near the little piscina at the south-east corner of the nave, and it appears that there are considerable pieces of this material behind the woodwork of the pews. This plastering, made with pounded brick, is hard and of good quality, and might in itself be termed a specimen of the opus signinum of the Romans. Another significant feature was only displayed to view when the west wall of the nave was recently denuded of its plaster. Here have come to light marks of three openings which had been walled up; one, in the centre, is a large arched opening, about 7 ft. 6 in. in width, with its crown about 17 or 18 ft. from the floor, the object of which is problematical, and the

[1] The example of St. Pancras presently to be noticed shows that this would have been the case.

[2] The question whether the original work in St. Martin, and in others of the earliest churches in Kent and elsewhere, is Saxon or pre-Saxon must for the present be reserved.

other two are splayed windows, about 4 ft. 6 in. high, the outer openings of which are permanently concealed by the walls of the mediaeval tower. These windows have jambs composed mainly of blocks of chalk, and round heads turned in Roman bricks and voussoirs of Kentish rag buried in abundant mortar. The peculiarity here is that this mortar is of the pink kind, composed in part of pounded brick, while that of the walling generally is white. There would be no special significance in this but for the fact that precisely the same peculiarity occurs in the original arched openings in the already mentioned Roman Pharos at Dover Castle, which are turned in mortar mingled with crushed tiles, while in the fabric generally the mortar is white. It is enough to record these facts, the historical purport of which cannot here be discussed.

One of the most instructive of our apsidal churches is that of St. Pancras at Canterbury, the remains of which, consisting (save in one portion) only in the lower courses of the walls, are to be seen in a field to the east of St. Augustine. They have recently been laid bare in connection with important excavations now proceeding near the site, and are made the subject of a paper by Mr. St. John Hope in *Archaeologia Cantiana*.[1]

The ground plan, Fig. 71, will be seen at once to promise features of novelty and interest. The main body of the building is an oblong measuring internally about 42 ft. 8 in. by 26 ft. 9 in., and it will be observed that the western quoins are buttressed, each wall being carried out for the purpose. Two similar buttresses or pilasters flanked the original wide entrance doorway at the western end, that measures 7 ft. 6 in. Notice should be taken of these buttresses as the feature is very rare in pre-Conquest work. They are of the same width as the thickness of the walls which is never more than about 1 ft. 9 in. and project 1 ft. 2 in. They occur on each side of the angles to which they give

[1] Vol. xxv.

strength (cf. St. Martin, ante, p. 121) and are in bond with the fabric of the walls. At the eastern end the oblong cella

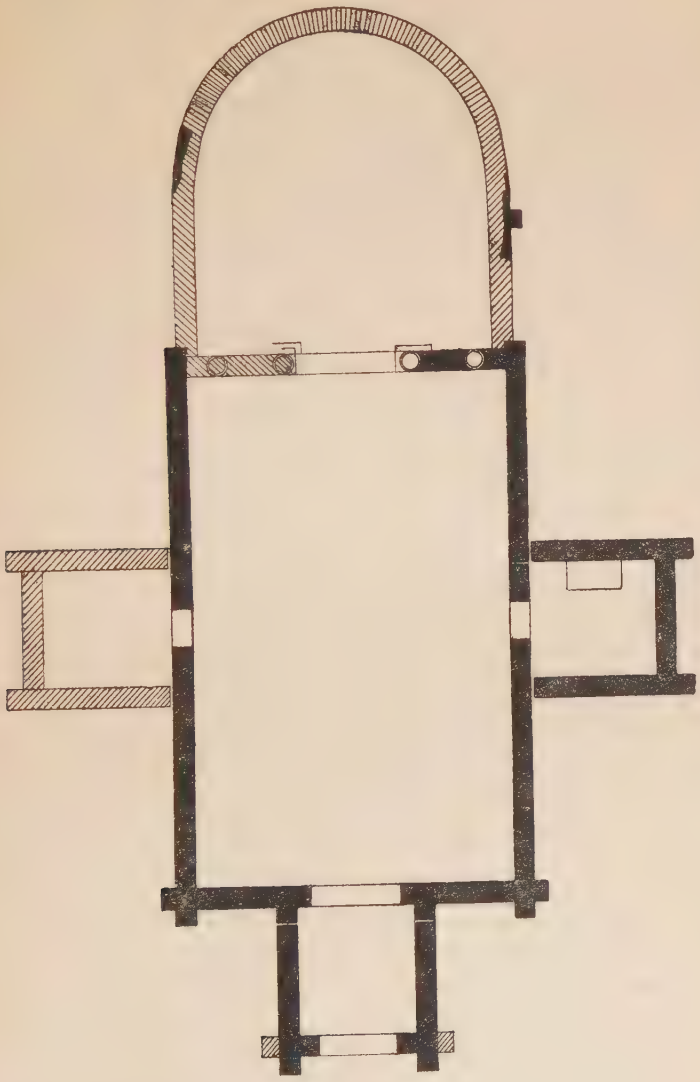


Fig. 71.—Plan of St. Pancras, Canterbury.

was terminated by a screen of columns or a wall, with a wide archway about 9 ft. in span in the centre, giving admission to a presbytery or chancel the walls of which, enclosing a

space rather less in width than the nave or cella, were carried on parallel lines for some 10 ft. and then came together in the form of a wide apse, probably of semi-elliptical plan, that terminated the whole interior. A buttress marked on the exterior the point where the curve of the apse began. Only the portions marked in black on the plan have actually been recovered and the rest is more or less conjectural.

The material is Roman brick, re-used, with the original Roman mortar in many cases still adhering to the surface, and these bricks or fragments of bricks are laid in two kinds of mortar, one yellow which was used in the beginning of the work, and the other white with fragments of sea-shells in it, that was employed later, but still before the fabric was more than half completed. The bricks are sometimes of triangular form and laid with the points inward according to a familiar Roman fashion.

Furthermore, the building has three adjuncts in the form of a western porch and two lateral chapels to which attention must be paid. Each of these features possesses in Saxon architecture a special importance over and above its own form and use. The western porch, as will be seen later on, is closely connected with the conspicuous feature of the western tower, while the side-chapel leads us on to the transept and is associated in this way with the development of the cruciform plan. At St. Pancras the walls of these three adjuncts, as is shown on the plan, are not in bond with those of the main building, and they are constructed with the white mortar that signifies a slight posteriority in date. Such at any rate is the case at the lowest part of the walls, as for example where the walls of the western porch are built up against the pilasters that flank the western door. The north wall of this porch is however preserved to a considerable elevation, and it can be seen that, after the height of about 3 ft. has been reached, the joint between the porch wall and the pilaster disappears and both are carried up together with no

division. This points to the explanation that the porch was an afterthought but that it was taken in hand before the work on the main building had proceeded far. The same is probably the case with the two lateral chapels. They are not, so far as can be seen, in bond with the main walls, but, as in all the rest of the building save the north wall of the porch, only a few of the lower courses of the walling are preserved. Higher up they may have been bonded in like the western adjunct. Of these lateral chapels only that on the south has been preserved, but there are indications which show that there was once a corresponding structure on the north. The southern chapel contains against its eastern wall the relics of a later mediaeval altar that is of special interest for us as it appears to be referred to by a writer of the fourteenth century, who tells to us about the altar and the building generally a noteworthy but perhaps hardly credible story.

The writer in question is one William Thorn, a monk of the monastery of St. Augustine, within the precincts of which the chapel we are dealing with is situated. He tells us that at this place King Æthelberht before his conversion possessed a temple or idol house, and that Augustine purged this temple from its impurities and changed it into a church dedicating it in the name of St. Pancras.[1] 'There is still an altar,' Thorn goes on, 'in the south porch[2] of the same church at which the same Augustine was wont to celebrate . . .' and it is evident from what he goes on to tell us that the chapel and altar had a traditional sanctity in later mediaeval days which gives them a certain importance in our eyes. Thorn's statement that the building was originally, or at any rate at one time, a pagan temple is of more immediate moment.

This same statement has been made in earlier and in later days about not a few of the oldest-looking of our Saxon churches especially in Kent. It has never in the case of any

[1] For the reason of this dedication, see Vol I, p. 279. [2] Postea, p. 129.

one been proved, and the tendency now-a-days is to discredit any suggestions of the kind. It is quite possible that the notion to which Thorn gave currency was a mediaeval guess, founded on the fact that antique Roman columns, or portions of these, were to be seen as part of the fabric at the eastern end of the nave.

The use of these columns, and the fact that the apse does not begin immediately beyond them but only after an intermediate rectangular space, are peculiarities that amount to the creation of a new type and this we will accordingly consider under a fresh heading.

IV. The Oratory with Presbyterial Space Screened Off Before the Apse.

In the simplest form of the Early Christian church, that of an oblong interior terminated by an apse (chap. 1, p. 14) the apse opens immediately at the end of the rectangular cella through an arch that takes in its total width in one span. In the chapter just referred to it was pointed out that in more advanced churches various arrangements were adopted for securing additional room in this presbyterial portion of the interior, by interposing variously shaped and contrived spaces between the nave proper and the actual altar-house. This was the beginning of the development of the choir, which in later mediaeval times assumes such large proportions in relation to the rest of the edifice. England is conspicuous for the extent to which in her churches this development was carried, and the choir of Canterbury cathedral, in its present stupendous extension, represents the final outcome of a process that in the same city we can see beginning at St. Pancras. Among English pre-Conquest churches that of Brixworth best represents this extension of presbyterial space, and any remarks that have to be made on it, with the necessary indication of foreign parallels, will be reserved until Brixworth is reached.

The other peculiarity noticed above, that it is not a single arch but an arcade or a screen which is interposed between the nave and presbytery, may have here a word. This implies the substitution of several narrower arches for one wide one, and this was rather in accordance with English tendencies. It is a characteristic of English architecture through the whole mediaeval period that even in edifices of great importance vault construction is rather avoided than favoured. There are it is true great English achievements in vaulting of which Durham is the chief, but in the main what has just been said holds good. As a fact, the builders of mediaeval Scotland seem to have been far more at home in vault construction than their brethren south of the Tweed. Among all the numerous specimens of pre-Conquest architecture in England there is only one that exhibits a vault in any other position than in a crypt. None of the existing Saxon apses has retained a vault if any ever possessed such a finish, and it is only in the porch at Monkwearmouth that an above-ground vault is to be seen. In arch construction there is the same deficiency, for though there are well-constructed Saxon arches, such as the tower arch at Barnack, 13 ft. wide, and the chancel arch at Worth, Sussex, which is over 14 ft. in span, yet as a rule the openings of Saxon doorways and chancel and tower arches tend to narrowness, and at Bradford-on-Avon the chancel arch is only 3 ft. 6 in.[1] in width, and one of the principal doorways only a little over 2 ft., while we find again and again examples of faultily cut voussoirs,[2] which show that the elementary principle of the radiating joint was by no means universally apprehended among Saxon builders.

[1] For purposes of comparison it may be noticed that some of the pre-Norman Scottish churches, old in type if not always in actual date, have very narrow chancel arches (Anderson, *Scotland in Early Christian Times*, 1, 60 f.) and so had an early oratory now almost buried in the sand near Gwithian in Cornwall. On the other hand, many of the early nave and chancel churches in Ireland have wide arches. See Fig. 15, ante, p. 29.

[2] e.g., the tower arch at Bosham, Sussex, see Fig. 94, postea, p. 170.

It is not therefore surprising to find the noble arches of ample height and span which terminate the naves of the normal Early Christian churches of the Continent replaced at times among ourselves by arcades, generally of three openings of smaller span. This arrangement occurs in the known Saxon churches of Reculver and Brixworth ; also at St. Peter-on-the-Wall. Designed at St. Pancras, it is conjectured with some approach to certainty at Rochester, with perhaps Lyminge. In later times there is a sort of make-shift reproduction of this early arrangement in squint-like apertures pierced on each side of a narrow chancel arch. One instance occurs in the fine Saxon church at Bracebridge by Lincoln. It is doubtful however whether any of these are really ancient. Some are certainly quite modern. A parallel in later work to the early Saxon chancel arcade is however to be found in the church at Westwell, near Ashford, in Kent, where a beautiful Early English arcade of three trefoil arches divides nave from choir.

The most interesting of the Saxon examples is that which existed at Reculver and this will be noticed on a later page. With the instance now before us at St. Pancras certain difficulties are connected, the full discussion of which would occupy space that cannot be spared. There is evidence here of the existence of four antique Roman shafts which might well have been the supports of an arcade between the nave and the presbytery, and the base and lower portion of one of these shafts is still in situ at the southern end of the original arcade, where it is indicated on the plan. The southern wall of the nave is however returned northwards at its eastern extremity, and brickwork in bond with this nave wall, and so belonging to the earliest stage of the building, fills in the space between the wall and the shaft, the bricks where they impinge on it being neatly cut to shape. Furthermore, another portion of wall representing the second, but still nearly contemporary, stage of the building, fills in the whole space

between this southernmost shaft and the next one in the row. Between the latter and the third shaft, on the other side of the central line of the building, there was an open archway of about 9 ft. in span, and this was the really effective chancel arch. The arcade of columns for some reason or another was apparently never an effective feature but was built up before the church was completed.

V. The Porch, Western or Lateral.
VI. The Lateral Chapel.

St. Pancras has already introduced us to the western porch and to lateral structures which as they have no external opening are rather chapels than porches. Both of these would have been described in mediaeval times by the word 'porticus' and on the uses of this term a sentence or two may usefully be said.

In classical Latin porticus as connected with 'porta' meant a vestibule, but as one of the most familiar architectural embellishments of a portal was a canopy supported on pillars, the word gradually acquired the sense of a colonnade. Porticus may therefore have the legitimate meanings of any columned structure or anything in the shape of a vestibule, and we find that in addition to these senses the word was used to denote any side space or adjunct opening into the main body of a building, though not actually a vestibule. Ducange, sub voce, quotes a mediaeval writer who even uses porticus for the sanctuary or altar end of the church as a whole. The lateral chapels at St. Pancras would be called porticus, while the western vestibule should in strictness have a qualifying word and be termed 'porticus ingressus.' When Dunstan at Glastonbury wished to make the width of a certain older church correspond to its length he is said by William of Malmesbury to have added 'alas vel porticus'[1] and this

[1] *Memorials of St. Dunstan*, Rolls Series, No. 63, p. 271.

obviously implies side aisles, which would come within the scope of the word owing to the use of a row of columns in the nave arcade. Effmann says that porticus is also used for the concentric aisle round a central circle or octagon, as at San Vitale, Ravenna; or Aachen.[1] On the other hand when Bede tells us of the burial of King Æthelberht that he was laid 'in porticu Sancti Martini,'[2] in the church of St. Peter and St. Paul (St. Augustine) he cannot be speaking of an ordinary side aisle for this would not be specially dedicated to a saint. He may be referring to a lateral chapel like those at St. Pancras, but there is the possibility that this porticus was one of the side arms of a Greek cross, a plan orthodox, as we have seen, for a sepulchral church. Such a use for porticus we find in Prior Richard of Hexham who tells us that Wilfrid's 'central' church of St. Mary was 'a quatuor partibus totidem porticus habens.'[3] The choir and transepts of a cruciform church on a Latin plan are called porticus in a passage quoted postea, p. 242.

With this note on the very wide and varied use of the word porticus in mediaeval literature, we may go on to consider the porticus in the sense of porch or vestibule rather than in that of side chapel.

This feature as we have seen[4] plays an important part in the economy of the old English church, and some of its religious and social uses have been noticed in the foregoing volume. It existed as an adjunct both of the churches with square-ended chancels and of the apsidal ones, and it sometimes appeared at the western end (St. Pancras, Monkwearmouth, Corbridge), sometimes on the south (Canterbury cathedral, Bishopstone), or again sometimes on the north side (Bradford-on-Avon). The shape and position of the St. Pancras western porch can be seen on the plan. It was entered from the west by an archway the imposts of which can be discerned on the existing north-western jamb, and

[1] *Die Karol. Otton. Bauten zu Werden*, p. 39. [2] *H.E.* ii, 5.
[3] Twisden, *Decem Scriptores*, col. 290. [4] Vol. i, p. 369.

which was about 11 ft. in height by a width of about 6 ft. 6 in. There are no signs that it was closed by a door. The other early western porches at Monkwearmouth and Corbridge in the north, have had towers reared over them and so have lost their ancient character. They will be noticed later on. Not many Saxon lateral porches actually survive but more modern porches have often been constructed in front of original Saxon doors, as is the case at Breamore, Hants; Dagling-worth, Gloucestershire, etc. Of existing lateral porches the most imposing is to be found at Bishopstone, near Seaford, in Sussex. The plan given in Fig. 72 shows the porch and western part of the nave which are of Saxon work. The square western tower and the eastern portion of the building, as seen in the general view, Fig. 73, are Norman.

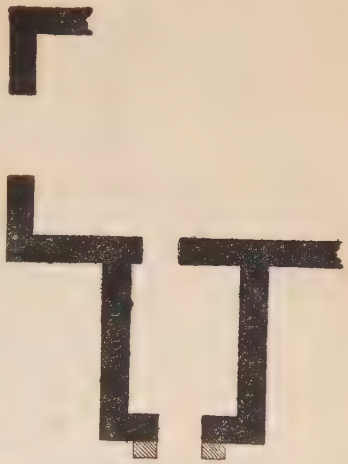


Fig. 72.—Plan of southern porch and western end of nave, Bishopstone, Sussex.

The porch at Bishopstone has a little Norman secondary porch applied in front of its own doorway, above which is a Saxon sun-dial. The height of the gable is 21 ft. There is some massive quoining in large squared stones at the outer angles, one stone being 4 ft. 3 in. high by 1 ft. 6 in. by 1 ft. The structure provides an interior space of 12 ft. 5 in. north to south by 9 ft. 2 in. east to west. The door into the church is not in the centre of the porch, but on the western side so as to leave the eastern part of the porch interior free, and this is a fact of some significance, as will be seen when we turn our attention to the porch or porches at the well-known Saxon church at Bradford-on-Avon in Wiltshire, of which the plan and section are given in Fig. 74.

This remarkable little monument is of the nave and square-ended chancel type but has been reserved for this place on account of its lateral porches. A few general words upon it may prove of interest to the reader.

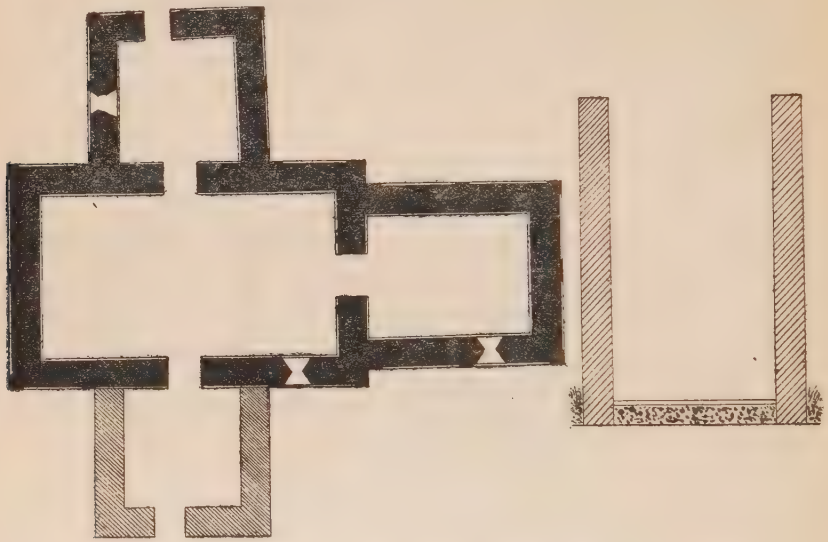


Fig. 74.—Plan, and section of nave, of the Saxon Church at Bradford-on-Avon, Wilts.

William of Malmesbury in his life of Aldhelm states that the West-Saxon bishop was generally supposed to have built a monastery at Bradford,[1] and adds, 'to this day at that place there exists a little church which he is said to have made in honour of the most blessed St. Laurence.'[2] Writing in 1858 the Rev. Canon Jones, then vicar of Bradford-on-Avon, stated that the site of Aldhelm's monastery 'was most probably near the north east end of the present (parish) church, a spot of ground there still bearing the name of the Abbey

[1] Necnon et apud Bradeford tertium ab eo monasterium instructum crebra serit opinio. (The other two were at Malmesbury and Frome, Somerset.)

[2] Et est ad hunc diem eo loci ecclesiola quam ad nomen beatissimi Laurentii fecisse predicatur. *Gesta Pontificum*, Rolls Series, No. 52, p. 346.

FIG. 73.—View of Bishopstone Church, Sussex, from the south-west, showing the Saxon porch and Norman western tower.

(To face p. 132.)

yard.'[1] On the site thus indicated there existed a confused complexus of buildings of various dates, and from the midst of these the perspicacity and zeal of Canon Jones succeeded in extricating the highly interesting little Saxon building which in its restored condition Fig. 75 presents to the reader.

When the building was taken in hand for restoration the chancel was divided into two stories and used as a cottage the chimney of which went up where the chancel arch had formerly been. The nave, also with an intermediate floor, was a school, and the schoolmaster's residence was in a house built up against it on the south. A woollen manufactory abutted upon it on the north and the western part had been modernized, so that everybody supposed it of the eighteenth century. About 1870 it was cleared and restored, but as needs hardly to be said the masonry has been so knocked about, patched, and renewed, that it is only in parts that we find any large surface of original work. This when it can be examined shows masonry of largish stones, running to some 2 ft. in height and width by 1 ft. in thickness, of the excellent local material the use of which gives the whole town of Bradford so handsome an appearance.[2] The stones are well cut though not accurately squared and a large number of the joints are not vertical or horizontal but sloping. The actual jointing

[1] *Wiltshire Archaeological and Natural History Magazine*, v, 12.

[2] There is a notice of Bradford-on-Avon in Freeman's *English Towns and Districts*, Lond. 1883. It is unfortunate that local patriotism has not availed to secure the preparation of a proper guide to the Saxon church that is so much visited. The guide now sold is a libel on the memory of its titular author. Dated 1892 it speaks of a time before 1857 as 'about twenty years ago'; it talks of the modern house as still abutting on the southern side of the nave, though this has been removed years ago; and worst of all presents the visitor with a plan in which there is an obvious error in the placing of the north door into the porch. On page 1 the church is claimed to be of the early part of the eighth century, but by pp. 21, 23, it has apparently been transferred to the tenth.

of the stones is however remarkably fine, and excited the admiration of such an expert in masonry as the late J. T. Irvine, who left among his papers a valuable set of drawings and notes about the church, made during the restoration from 1869 to 1874.

The walls, which have a mean thickness of 2 ft. 5 in. exclusive of plinths and pilasters, rise from a plain square plinth now owing to the accumulation of the soil only visible on the south and east. The quoins exhibit no special treatment, except what they receive in connection with the general scheme of external enrichment which is one of the peculiarities of the structure. This consists in a series of pilasters in the lower story of the elevation and arcading above, the two being separated by the projection of a horizontal string course. The pilasters embrace the angles, and the various wall spaces are divided below by intermediate pilasters, some of which rise with a step-like base from a shallow plinth distinct from the lower projecting plinth just mentioned. The short pilasters of the arcading above have trapezoidal bases occasionally stepped, and plain trapezoidal caps. On the east face of the chancel and in the east gable of the nave and north gable of the porch they are reeded. The scheme of decoration seems to have been carried out by cutting into the face of the finished wall to a shallow depth, the jointing of the stones being in parts of the work entirely ignored, so that at first sight the effect is that of incised enrichment rather than of architectural ornament proper, which is more closely connected with construction.

To say this however does not imply that the decoration is out of all relation to the fabric, or that, as Sir John Henry Parker suggested, it might have been added at a later period to an already existing unadorned structure. A careful examination of the work, especially in regard to the planes of its various surfaces, shows that the enrichment was planned when the stones of the walling were laid, and is necessarily contemporary with

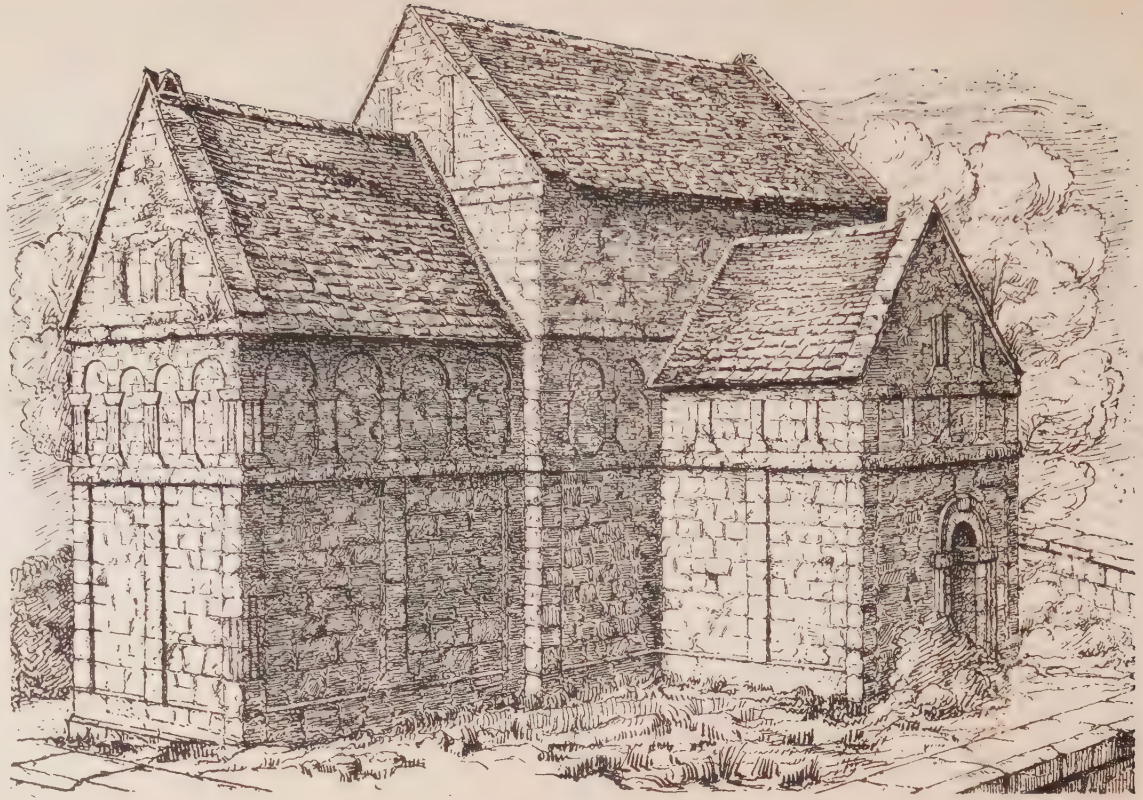


FIG. 75.—Saxon Church at Bradford-on-Avon, Wilts, from the north-east.

(To face p. 134.)

the fabric. Fig. 76 shows a portion of it on the north side of the chancel drawn to scale,[1] with indications of the relations as regards projection of the different faces. The string course, shown in the general view (Fig. 75) as dividing the wall horizontally at about two thirds of its height, is formed all

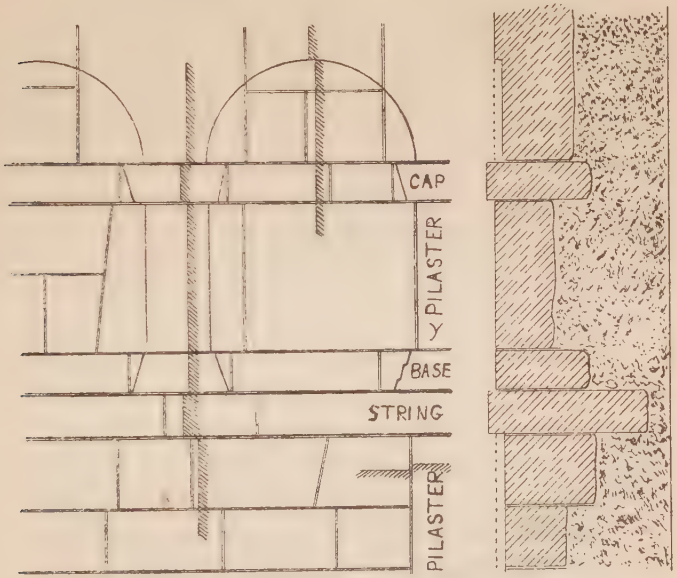


FIG. 76.—Pilasters, arcading, etc., on the exterior of Bradford-on-Avon, with section of chancel wall. Scale $\frac{1}{32}$ of nature. The original wall face is represented by the face of the upper and lower pilasters and the part above the arcading.

along in a single course of stones $6\frac{1}{2}$ in. high, and always projected about 1 in. from the main face of the wall. The trapezoidal bases of the pilasters of the arcade above the string course, with the parts between them, are also formed in a single course of stones, and the same is the case with the capitals above the pilasters and the parts between them. The

[1] Some of the smaller features in the drawing have been taken from other parts of the building, in order that a conspectus of the peculiarities of the work may be presented.

height of these courses is much less than the average height of the wall stones generally, and whereas the wall stones vary in size in the most irregular manner, these particular courses run practically without a break all round the building.

Furthermore, the face of the trapezoidal caps is in projection over the original main face of the wall, just as is the face of the string course below, and before the arcading was incised this course wherein the caps are cut must have stood out like the string course, though with somewhat less projection. Whether this was also the case with the course in which the bases are cut is in the present condition of the work not easy to decide. The pilasters lastly, though generally cut out of wider stones, are in some cases, as on the east face of the chancel, in stones of just the width required, while in almost every case the height of them, about 2 ft., is in a single stone, thus showing that the pilasters, like the caps and bases, were prepared for in the structure of the wall. These observations, which can be made on the building in its existing condition, are borne out by the results of an examination of the actual fabric of the east wall of the chancel made during the restorations, and embodied in one of Mr. Irvine's invaluable drawings reproduced at the right hand side of Fig. 76.

It is clear therefore that the enrichment, though of the incised kind, is in close connection with the structure with which it must necessarily be coeval. The fact thus established has a bearing on the debated question of the date of the building. Some idea of the probable date of the decorative arcading, and hence of the whole structure, may be gained by comparing it with a feature bearing a remarkable resemblance to it in a church in a distant county. The reference is to a scheme of shallow arcading which occurs round the interior of the nave of the Saxon church of Dunham Magna, Norfolk (Fig. 77). The scale is rather larger than at Bradford.

We enter now the little church through the doorway into the north porch. This is extremely narrow and the jambs slope con-

siderably, being 2 ft. 1 in. apart under the imposts but about 2 ft. 4 in. below, and it is much to the west of the middle of the wall. The reason for this doubtless is that an altar was originally placed against the eastern wall within the porch, which was in this way turned into a lateral chapel, and the same surmise may be made about the porch at Bishopstone. It has been a subject for discussion whether or not there was a corresponding porch or chapel on the southern side. Conclusive evidence that this was the case came to light in the course of the restoration, and fully satisfied Mr. J. T. Irvine who had been at first disposed to doubt it. Now that the southern side of the nave has been set free and cleaned, the mark of the old porch is plainly to be seen upon it, and is quite distinct from the marks of the house that till recently was built up against this side of the little structure. If we replace on the plan this second porch we shall find that the two porches measured together offer an interior space equal to nearly two-thirds the area of the nave. Lateral porches of this size, especially when used also as chapels, become something like transepts, and as we shall see later on have an importance in connection with the general development of ground plans.

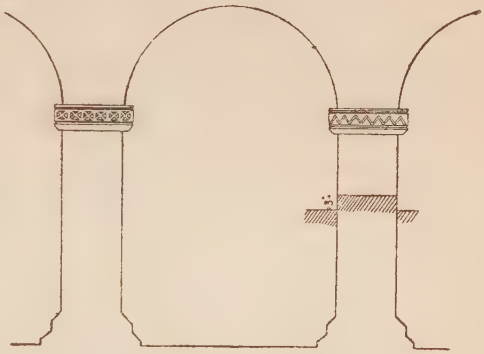


Fig. 77.—Arcading in the interior of the nave of Dunham Magna, Norfolk.

On entering the body of the church we are struck all at once by the great proportionate height of the side walls, of which Saxon peculiarity Bradford presents an extreme example. There is a plain plinth all round the walls of about 2 in. projection. Leaving this out of account, the nave measures nearly 25 ft. in length by 13 ft. 8 in. in width, but the height

to the top of the walls is more than 25 ft., so that the interior is as high as it is long and nearly twice as high as it is wide. The section appended to the plan, Fig 74, shows this peculiarity. In connection with this it is important to know that there is no trace that the church or any part of it ever had two floors. This suggestion, which had been made, was decisively negatived by the results of Mr. Irvine's technical examination of the structure when under restoration. The chancel, measuring 13 ft. 4 in. in length by a mean of 10 ft. 2 in. in width, is entered from the nave through an archway 3 ft. 6 in. wide, that is for the most part a restoration. It is the narrowest chancel arch in any church under notice, and can in this respect only be paralleled in certain oratories of primitive type though of uncertain date in Orkney and Caithness, referred to on a previous page (ante, p. 127).

The jambs and archivolt both in this arch and in the doorways exhibit the characteristic strip-work already illustrated. The treatment of the archivolt of the chancel arch reminds us of the classical ionic architrave with its three fasciae. The reeded pilaster of the north door may be compared with the pilasters similarly treated on the exterior. All the imposts are square and unadorned. There are three windows preserving more or less their primitive form but only that in the chancel is really original. That in the south wall of the nave is a restoration and the porch window has been altered. These windows are all splayed outside and in, and the original window in the chancel has sloping jambs.

The last feature to notice is the occurrence high up in the eastern wall of the nave above the chancel arch of two figures of angels sculptured in low relief, in a style that shows little plastic feeling and might almost be called incised work. They are hovering horizontally in the air each holding over the two arms a napkin. They are the most important or at any rate the best preserved examples of Saxon figure

sculpture in its connection with architecture, and form no doubt a portion of a lost group, a figure of the Crucified originally forming the centre. As has been previously explained, no attempt is made in this volume to deal with Anglo-Saxon sculpture except in the tectonic forms of carved capitals and similar details. Any discussion of the Bradford angels must therefore be reserved, but it is well to mention that Canon Jones stated that they were 'found embedded in the wall' above the chancel arch one on each side, and when he wrote in 1858 they were then 'placed over a wooden porch which has been erected as an entrance to the building on the west side.'[1] The reliefs are accordingly not now in situ but were placed where they are now at the restoration of the building.

[1] *Wiltshire Magazine*, loc. cit. p. 449.

CHAPTER V.

THE TYPES AND FEATURES OF SAXON CHURCHES (*Continued*): THE WESTERN TOWER.

VII. The Western Tower.

We come now to one of the most important features of this phase of architecture and we pass naturally to this from the consideration of the western porch, for it is one of the peculiarities of Saxon church architecture that in some cases a tower was built upon the walls of a previously existing porch. The most conspicuous instance occurs at Monkwearmouth in county Durham. It will be remembered that about 675-80 A.D. Benedict Biscop founded two monasteries in the north, one at the mouth of the Wear and another not far away at Jarrow-upon-Tyne. Monkwearmouth, as it is now called, is joined to Sunderland by a bridge over the Wear and is a busy place of factories and shipyards. In the centre of it, and in surroundings which have not lost their old-fashioned aspect, there stands in an ample burial ground the church of St. Peter that presents one of the most curious illustrations of the abnormal character of Saxon work, and is a building over which a little time may profitably be spent.

The Saxon parts of the present church are shown in plan in Fig. 78. The nave, it will be noted, is of abnormal length

measuring about 65 ft. by a width of nearly 19 ft. It is true that the Saxon chancel and chancel arch are gone, but the southern jamb of the present chancel arch has Early Norman character, and it is impossible to believe that the Norman builders who had no penchant for elongated plans had actually lengthened the already, to them, abnormal proportions of the Saxon nave. The present chancel arch must be in the same place as the Saxon one or if there have been any alteration it has been brought further westward. The west wall of the nave is original and is a little over 2 ft. in thickness. The south wall has been rebuilt on the original lines. The north

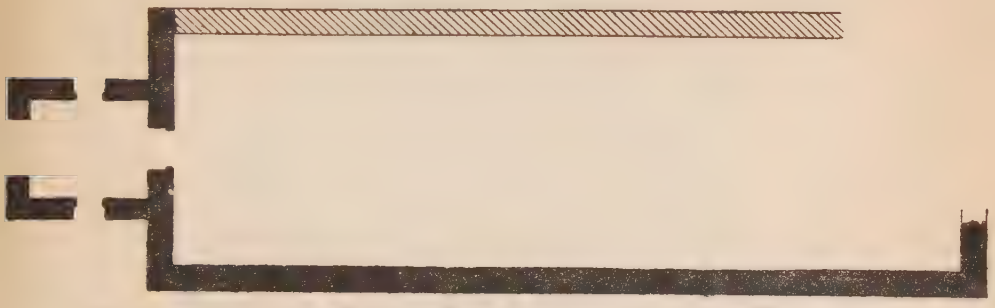


Fig. 78.—Plan of the Church of St. Peter, Monkwearmouth, Durham.

wall has been replaced by an arcade giving access to an aisle, but the western quoin of it is still visible on the exterior. The technique is rubble-work of rudely squared stones and at the corners the stones are larger and more carefully squared and fitted but there is no long-and-short or big-stone quoining. Height is again here a feature, for the west wall of the church (Fig. 79) measures externally 23 ft. 6 in. in width, and 31 ft. in height to the beginning of the slope of the gable, which ran upwards at an acute angle with the horizontal of about fifty degrees.

The drawing gives the line of the original gable on the north side as it was seen in 1865, before the present north aisle was built. In the centre, an arched doorway 3 ft. 6 in. in width gives admission to the interior, and to the west of

Fig. 79.—Western tower of Church of St. Peter, Monkwearmouth, Durham, before the last restoration.

this is built a porch, measuring internally 8 ft. from north to south by 9 ft. 5 in. from east to west, and covered with a barrel vault of stonework running east and west, 12 ft. 6 in. high to the crown. There are doors to the porch on all four faces. Those to the north and south, 2 ft. 6 in. in width,

Fig. 80.—Western doorway of porch, Monkwearmouth.

have their jambs rebated and heads splayed for doors opening outwards. The east door, also with a rebate,[1] leads into the church. The western archway, 4 ft. 10 in. in width, which has never been closed by a door, is of extremely elaborate construction, and gives its stamp to the whole work (Fig. 80).

[1] The rebate reduces the aperture of the doors on the north, south, and east of the porch to somewhat smaller dimensions than those given.

Its jambs are composed of upright slabs lining the opening, surmounted by other slabs laid flat and bonding into the wall. On the surfaces thus formed there is carved on each side of the doorway an ornament consisting of a pair of serpents intertwined, after a fashion which will be understood from the drawing, Fig. 81, which shows the condition of the slabs when first uncovered in 1865. On these slabs, as on a plinth, stand on each side two stone shafts, about 21 in. high by 10 in. in diameter, ornamented with an elaborate system of projections and cuts, that have evidently been produced in a lathe. These turned mouldings are far superior in their delicacy and accurate cutting (Fig. 82) to the general run of Saxon baluster shafts.

Fig. 81.—Southern jamb of doorway to porch, Monkwearmouth, Durham.

These twin colonnettes carry a massive impost 11 in. high, chamfered beneath, and worked on all its edges with a roll moulding. From these springs the arch, formed of nine carefully cut voussoir stones of varying sizes, running right through the thickness of the arch, and once recessed on both outer and inner face, after the manner of the ionic architrave. The arris between the face and the soffit of the arch is worked into a roll like that on the edges of the imposts.

Above the arch, at a height of 13 ft. 3 in. above the ground, the face of the porch is enriched with a flat string course, composed of various panels framed with cable mouldings, and carved in low relief with representations of four-footed animals, and at least one human figure.

At a higher level comes a comparatively large window, giving light to a chamber over the porch. The date of this window is problematical; it is slightly splayed internally, from an aperture of 2 ft. 6 in. to an inner width of 2 ft. 10 in., and has a cable moulding worked on the inside arris as in other parts of the porch. The outer arch has in any case been modernized, but the inner one looks antique. From this chamber also a narrow doorway, now the only means of access to the interior of the tower, forms a communication with the nave of the church. The aperture of this doorway towards the nave, only 1 ft. 5 in. wide, has been modernized, but within the chamber where it is 2 ft. 6 in. wide its head was cut in a single big stone, and the construction of it shows clearly that it is an original feature. On the northern external face of the tower can be seen the marks of a square-headed doorway now blocked, that is at a height which would admit of access from the exterior to the chamber above the vault. This doorway however does not seem part of the original work. In connection with this a view of the church in the *Gentleman's Magazine*, vol. LXXXII/2, p. 513, may be consulted.

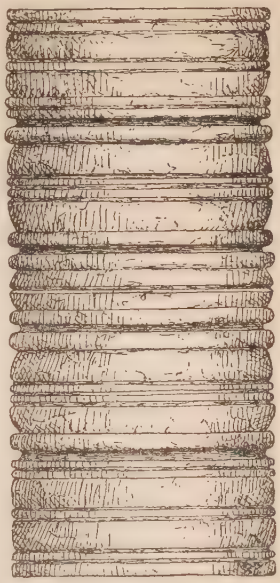


FIG. 82.—Turned shaft from jamb of western door to porch, Monkwearmouth, Durham.

Returning to the western face of the porch on the exterior, we notice above the large window a second string course, and from this level, at a height of 21 ft. above the ground, began the slope of the original gable that surmounted the porch. Under the apex of this gable there are five large stones let into the wall, the uppermost of which projects like a semicircular disc set horizontally, while the second shows the outline and shape of a human head, the tip of the lobe of the left ear being still, on a close inspection, visible. The two large stones next below have been hacked away flush with the wall, and the lowest has evidently been renewed in more modern times. It is clear that there was a statue here in high relief, about 6 ft. in height, and as it is placed with reference to the original gable, and has about it no marks of being a later insertion, it is presumably original.

At this point occurs the junction of the original work of the vaulted porch with chamber over it, and the later tower reared upon its walls. On the western side of the tower as it at present stands there are clearly seen the sloping lines of the original gable over the porch, and that the upper part of the tower is a later addition is further proved by the fact that, to a great extent, it blocks out the light from the two original windows in the western wall of the nave. These windows are seen in the sketch of the interior (Fig. 83). The tower walls outside rise in front of these windows, and light is only admitted by splaying away the edge of the tower wall where it abuts on that of the nave, leaving an upright slit, the position of which is marked by the arrow at A, in Fig. 79. It must be remarked about these windows that they are splayed in the interior only, the aperture for light being 1 ft. 8 in. across and the width of the internal splay 2 ft. 9 in., and they have the peculiarity that in the lower part of their jambs, underneath the upright slabs that form these jambs, there are set baluster shafts of a kind similar to those in the porch though not so elaborate in execution. They are built firmly

into the corners of the jambs and have their bases on a narrow ledge from which the sloping sill of the window rises at their back. They are the same height as the slope of the sills, so that the top of them comes nearly on a level with the bottom of the actual aperture of the window.

The existence of these shafts was only made known at the restoration of 1866,[1] previous to which the windows were covered up with plaster. It must be assumed that they are in their original position, and were intended as counterparts to the balusters in the external opening of the porch. The effect of them in the window jambs is however not very satisfactory. The upper part of the tower possesses features common to the numerous square western towers in other parts which will presently be noticed.

Fig. 83.—Sketch of the western wall of the nave, Monkwearmouth, from the interior.

This is not properly the place for any discussion of the relative dates of the various portions of the structure, but so important is the question whether or not the porch and

[1] *The Ecclesiologist* (Cambridge Camden Society) for 1866, p. 362, and the *Transactions* of the Architectural and Archaeological Society of Durham and Northumberland, vol. 1, p. 141, and appendix, contain notices of the church at the time of these restorations, with many valuable illustrations. Mr. Hodges's paper in *The Reliquary* for July 1893 gives a good account of the church.

the nave walls are the original work of Benedict Biscop in the seventh century, or at any rate near his time, that a brief note on the history of the site may here be permitted.

It has been already noticed that we possess in the writings of Bede an almost contemporary notice of the first building of the abbey of Wearmouth.[1] Bede's account has been so often quoted that it is sufficient to say here that Benedict Biscop, founder of the monastery, in the year 675 A.D. went over to Gaul and brought back with him some masons to build for him a stone church 'after the manner of the Romans in which he ever took delight.' To Gaul moreover he sent for certain workers in glass; and for sundry fittings of the church not elsewhere to be procured he went himself on more than one journey to Rome. The fabric of the church must have been slight, for it only took a year to build; it was on the other hand tolerably spacious, for even in Bede's time the community of monks in the combined monasteries of Monkwearmouth and Jarrow, of which the former was the chief, numbered 600 souls. It was not the only church in the monastery however, for we read also of a church of Our Lady and an oratory of St. Laurence, but it formed the place of assembly of the monks on important occasions, and was profusely adorned with several sets of paintings, had glazed windows, and a full equipment of sacred vessels, fittings, and vestments.

The question naturally arises whether any of the work of Benedict's masons actually survives. We know that the sister establishments at Wearmouth and Jarrow flourished until the time of the disastrous inroads of the Danes, who, in the year 867, plundered and almost destroyed the churches and monasteries of Northumbria. From that date to the time of the Norman Conquest they disappear from the pages of history, but shortly after the Conquest they are, for a time, revived, and become once more the

[1] *Historia Abbatum*, c. 5, Plummer's Bede, 1, 368.

seats of monastic communities. In 1083 however, the monks from these restored monasteries are transferred to Durham, and the houses of Wearmouth and Jarrow sink to the position of unimportant subordinate cells to the great cathedral abbey.

It is of course conceivable that the church of Benedict Biscop, the rapid erection of which has just been referred to, might require rebuilding in the two hundred years between its first erection and the Danish invasion. We may accordingly ascribe the work or portions of it (1) to the founder's own time, (2) to some epoch in the two succeeding centuries, (3) to the period between 867 and the Norman Conquest, or, again, (4) to the era of revival from about 1075 to 1083. With this latest date would accord the style of the Early Norman pier of the present chancel arch at the east end of the building, the half-columns of which possess the curious bulbous base which occurs in other examples of eleventh-century work in England, such as the crypt at Lastingham and the slype at Worcester; while, though the plan, with the three half-columns, appears Saxon, the masonry and tooling are characteristically Norman. The upper part of the tower, on the other hand, agrees closely in style with the numerous examples of square western towers, occurring in Northumberland, Lincolnshire, and other parts, which are not Norman in character, and are generally ascribed to the first half of the eleventh century. Its total height is 60 ft., which, on a face width of a little over 11 ft., represents proportions far taller and more slender than are normal in English Norman architecture. It is not reduced by sets-off, nor was it intended to taper, though the weight of the tower bearing on the western archway has caused it to spread slightly, and made the tower measure an inch or two more at the base than at the summit. This upper portion of the tower appears earlier than the chancel arch, but it is quite possible that the two are practically contemporary,

and coaeval too with the tower at Jarrow, which is Norman rather than Saxon in character.

The questions of date now narrow themselves down to the query whether the lower portion of the tower and west end of the nave, which we have seen to be prior to the upper part of the tower, are due to an earlier restoration after 867 but before the Conquest, or are relics of the pre-Danish period. Now, Simeon of Durham, writing in Northumbria in the early years of the twelfth century, describes the havoc wrought by the Danes as so extensive that the monasteries of the province were reduced to a desert condition, only bare walls being left, and the very sites of some passing out of knowledge altogether. The revival of 1075 was brought about by a pious pilgrimage undertaken by some monks from the south of England, who 'had learned from the history of the Angles how that the province of the Northumbrians was formerly the home of crowds of saintly monks,' and who wished to visit the holy but now deserted sites.[1] When the country had been reduced to such a condition, it is almost certain that any rebuilding of the churches ruined by the Danes would have been of a somewhat perfunctory character. The earliest work at Monkwearmouth is however marked by extreme care and elaboration in detail. The baluster shafts, the interlaced serpents, the roll mouldings, the cable mouldings, the carved frieze of animals, the big statue in the gable, the balusters in the window jambs, are not everyday work, but represent quite the most extensive collection of carefully wrought details to be found in the whole range of extant Saxon buildings. It would have been practically impossible in that region between 867 and the eleventh century, while for its ingenuity and thoroughness it is exactly what we should expect either from the wealthy and enthusiastic Benedict, or from one or two of

[1] *Hist. Dunelm. Eccl.*, iii, 21, Rolls Series, No. 75/1, p. 108 f.

his successors during the flourishing period of the foundation. It may be added that the style of the work, though in many respects puzzling, agrees better with an early than with a later date, for the reason that none of the known later features, which have been connected above with Germany, make their appearance in it. On the other hand there is one feature that would suit the eighth or ninth better than the seventh century. This is the great height of the nave walls, which is a peculiarity found neither in the basilicas of Romanized lands nor in the Celtic oratories, but comes into vogue in parts of the Continent as well as in England in the times of unrest and danger which fell upon Christendom when the Vikings forced their keels up the rivers of Western and Central Europe. Lofty walls and small apertures high up in them were a means of protection against raiders. In this case of Monkwearmouth perhaps the suggestion of a rebuilding of Benedict's original structure before 867 will best meet the probabilities of the situation.

There is one other certain case of a western tower built over an earlier porch and one or more in which the case is doubtful, while there is one instance known from literary sources in which it seems likely that a tower was reared on the walls of an existing *lateral* porch. The certain case is Corbridge above the Tyne valley, near the point where one of the great Roman roads to the far north crossed the Wall on its course into Caledonia. The pre-Conquest church, the nave of which survives, was entered through an ample western porch, the plan of which, reproduced by permission from one by Mr. C. C. Hodges, is given in Fig. 84. The

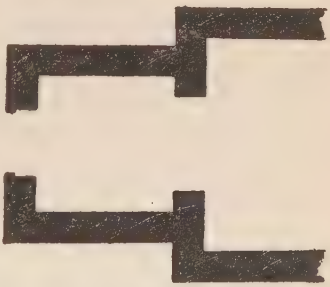


Fig. 84.—Plan of tower and western end of nave, Corbridge, Northumberland.

following description is taken from that by Mr. Hodges in the *Reliquary* of January 1893. 'The porch was entered by a round-headed doorway, five feet wide, and more than nine feet high, having a semi-circular arch. Above this is another semi-circular arch which is partly constructional, as it serves as a relieving arch, and partly ornamental, as its voussoirs are ornamented with a very early example of chevron work. This consists of a row of saltires, one on each voussoir, which vary in size. Immediately over the doorway is a small window with round head, widely splayed on the inside. Between the porch and the nave is a great entrance archway, eight feet two inches wide, and sixteen feet high (Fig. 85). The jambs are quite plain, and are formed of enormous stones, each one of which is as long as the wall is thick, so that there are no vertical joints in the jambs. At a height of ten feet six inches from the floor are projecting impost stones ten inches thick. These are of different sections on the two sides, and are Roman mouldings re-used, having been taken from the base or cornice of some great building. The arch is stilted to the extent of a foot. The voussoirs, of which there are thirteen, above the springing line, are two feet four inches long, and go right through the wall; they are, however, three inches thinner than the wall. This difference is left as a recess on the east side, but does not extend to the two stones immediately above the impost which stilt the arch. It is clear from this, as from the dressing of the stones, that the arch has been bodily transferred from a Roman gateway, and merely re-set in its present position. The surrounding walls are almost, if not entirely, of Roman worked stone. Cramp holes and grooves, lewis holes, and broached tooling are everywhere visible, and the wavy, uneven surface of the walls, now that they are denuded of their plaster, although built of large square stones, shows that these did not always fit the thickness of the wall they were being built into.

'The nave was about forty-eight feet long, and seventeen feet eight inches wide, and about twenty-nine feet high to

Fig. 85.—Western portal, Corbridge, Northumberland.

the wall-head. It was lighted by three windows on either side, one of which remains entire, but a considerable portion of the heads of two of them are still in situ in the north wall.

From these remains we gather that they were of the same form and dimension as the still perfect window over the west door. The heads are in two stones only, one forming the internal arch and the other the external arch. The jambs, however, are formed of long through-stones. The inner head stones are by far the larger, as the splay is considerable. . . .

'The ancient chancel, and the arch opening to it, have entirely disappeared, and the indications to show the terminations of the nave in this direction are but slight. The west gable, however, remains entire, and shows that the roof, which seems to have been of thatch, probably ling, was of very high pitch, its ridge being nearly fifty-two feet from the ground.

'At some period before the Conquest the roof of the porch was taken off and the gable removed. The side walls were then carried sheer up beyond the gable of the nave to form a tower. The north, south, and west walls of this were built on the walls of the west porch, but the east wall rested on the western gable of the nave. It is fortunate that this gable was not removed like that of the porch, or we should never have known how the change had been effected. The modern roof of the nave is much lower, both at the eaves and the ridge, than that of the early church, and portions of the west wall of the old nave now flank the tower, like buttresses which seem to rise up through the roof. The old gable window is now above the roof, and what is now its external side was formerly inside, and beneath the old roof, and its original external face is now to be seen inside the tower.'

To this description from the pen of Mr. Hodges there only needs to be added the note that in the case of the window in the west gable of the nave just mentioned we find presented what looks at first sight like a double splay. There is the wide external splay which was originally internal, and a smaller splay on what is now the inner face of the

wall. This, if original, would make the window a double-splayed one and there are chronological reasons which would render this very improbable. An examination of the window shows however that this inner splay has merely been hacked away in more recent times to let in additional light to the ringing-chamber. The window is really a single- or internally-splayed one like those in the north wall of the nave.

The western arch, Fig. 85, is one of the most remarkable features of the kind in England. Its great height, and the large stones of which it is composed, give it an imposing aspect that its absolute plainness only increases. All the stones, whether in jambs or arch, go through the whole thickness of the wall. The technical peculiarities noted in the description just given make it practically certain that the arch at any rate if not the jambs is Roman re-used. In connection with the doubtful question whether or not the chancel arch at Escomb is also Roman re-used, it must be observed that the Corbridge arch does not show in the jambs the slab-like stones set alternately upright and flat, which are characteristic of the Escomb arch with other Saxon examples, such as the doorways at Monkwearmouth.

The proportions of the plan of the Corbridge porch-tower should be noticed. It measures internally from west to east in the mean 11 ft. 4 in. and from south to north only 10 ft. 11 in. At Monkwearmouth the corresponding measurements are 9 ft. 5 in. and 8 ft. These proportions accord with those of unaltered Saxon porches in which the dimension along the axis of entrance is always greater than that at right angles to this. Thus Bishopstone porch measures 12 ft. 5 in. by 9 ft. 2 in., Bradford-on-Avon porch 10 ft. 6 in. by 10 ft. 2 in. (both in the mean), St. Pancras, Canterbury, western porch 10 ft. 7 in. by 9 ft. 6 in. The two known examples of towers reared on porches make it worth while inquiring whether this may not have been done in other Saxon examples where the base of the existing tower measures more along the

line of access than in the other direction. The most promising instance is Bardsey, near Leeds, where we have a western tower joined to a church which possesses several early features. The walls of this tower on the ground level are barely 2 ft. thick and the space they enclose measures 10 ft. 2 in. from west to east by 8 ft. from south to north. There is a narrow north door and old round-headed lights above it to north and south that are internally splayed and have sloping jambs, Fig. 86. Externally on the western face there are marks of a gable similar to though not so pronounced as those at Monkwearmouth, while the quoins at the lower part of the tower, when compared with those higher up, are of different and earlier character. As against these indications that the lower stage of the tower was originally a porch must be set the fact that there is no indication of a western door. Brixworth has been claimed as another instance of this kind, though there is no indication of a gable or sign of a break in the work between the lowest and second stages of the western tower. The plan here shows dimensions that are greater from south to north than they are along the line of entrance, thus reversing the arrangement just noted as normal. See Fig. 151, postea, p. 248.

Fig. 86. — Plan of tower and western end, Bardsey Church, near Leeds.

On the other hand there are towers which present no appearance of having been porches but which yet have the porch form of plan. The western tower at Ledsham, between Selby and Leeds, Yorkshire, measures 12 ft. 3 in. west to east by 9 ft. 8 in. in the other direction. It has a south door but none on the west. Middleton by Pickering, Yorkshire, which has a western door, gives us west to east 11 ft. 10 in. by 10 ft. 6 in., and Wharram-le-Street, by Malton in

the same county, 11 ft. 5 in. by 10 ft. 6 in. with a western doorway. Deerhurst western tower is exceptional in plan. It measures nearly twice as much west to east as it does south to north, but it is divided into two by a cross wall running in the direction last given (Fig. 169, postea, p. 299). At Bosham, Sussex, a western tower without any external doorway to it, measures internally 19 ft. 2 in. west to east by a mean of 15 ft. 7 in. north to south. Hence it follows that internal proportions are no criteria as to whether a structure is ab origine porch or tower.

The original Romano-British or Saxon cathedral at Canterbury, the plan of which drawn by Professor Willis from literary sources is so well-established, that it is generally treated as a monument,[1] possessed before the Conquest two towers on its flanks halfway along the nave. The one on the south offered the principal entrance to the church and was dedicated to St. Gregory. The probability is that this was originally a porch over which the tower was afterwards built.[2] It would have been impossible for Romanized Britons or Saxon Christians of the first generation to have planned these flanking towers which do not belong to the architectural ideas of their time, but lateral porches of entrance would be quite in accordance with early Saxon habits.

Passing now from the porch-tower to the tower proper we reach one of the outstanding features of our early architecture. The general aspect of the pre-Conquest tower has already been indicated. It will as a rule rise plain and unbuttressed and possess belfry openings of the form described on page 63. Western towers answering to this general description exist in some abundance and

[1] This building will be treated of in the sequel, postea, p. 260 f.

[2] The fact that this part of the structure was called by the vernacular term 'Suthdure' (south door), a word incorporated in the mediaeval Latin of the writer who tells us much that we know about the church, shows that it was envisaged as a porch not as a tower. See Willis, p. 10.

are most frequently to be met with in the eastern parts of the country especially in Lincolnshire. Referring to the map at p. 344 the three eastern Districts numbered III, VII and VIII supply about sixty-five examples while the rest of England furnishes hardly a score. Of the Saxon churches which are dotted so thickly about Lincolnshire, a county which has more pre-Conquest work to show than any other, three fourths, or thirty out of about two-score examples, have western towers. So characteristic of Lincolnshire is the form that the name 'Lincolnshire bell-towers' is sometimes given to the whole group. Such towers cannot however be regarded as, in a strict sense, peculiar to the eastern counties, for specimens with some or all of the characteristic marks are common further north, and occur sporadically in the other parts of the country, as at Wickham, Berks; Bosham and Sompting, Sussex.

Most of these western towers especially the Lincolnshire examples possess as their distinguishing feature the double belfry openings with mid-wall shafts, or where the belfry stage has been rebuilt the previous existence of such openings can be inferred from analogy. They are however commonly wanting in the more usual pre-Conquest indications such as long-and-short quoins, pilaster strips, and double-splayed windows. Lest their pre-Conquest character should be doubted however, it may be pointed out that a few towers agreeing with the mass in their general aspect do show these special marks of origin, while the double or triple openings with the mid-wall shafts occur in a few cases in the nave walls of churches that can be pronounced for other reasons to be undoubtedly Saxon. Brixworth; St. Martin, Wareham, Dorset; Worth, Sussex; Wing, Bucks, are examples. Accordingly the possession by a plain unbuttressed tower of this particular form of belfry opening gives it a Saxon character, though on the other hand it must be admitted that some of the Lincoln-

shire examples, which exhibit this distinguishing mark, have other details that betoken a later date. Such examples are Boothby Pagnell and perhaps Harpswell, Lincolnshire. The truth is no doubt that this particular feature was so well established in this region before the Conquest that it continued in use after that epoch. There need be no hesitation however in accepting the feature as Saxon (see ante, p. 63).

It will be convenient to deal in the first place with such towers as possess none of the special Saxon features except the belfry openings—these towers number about fifty—and to reserve for subsequent notice the few exceptional examples that do exhibit other pre-Conquest indications.

A selection may be brought together to illustrate the form and details of these monuments. As the subject embraces many points of interest it may be advisable to draw up the following scheme of treatment. We deal then with (A) the general form, (B) the architectural treatment of the elevation, (C) the finish at the top of the towers, (D) the west door where it exists, (E) the smaller lights on the lower stages. Entering then the interior there will fall to be noticed (F) the tower arch, (G) the internal fittings including openings to the church above the tower arch, (H) the means of access to the upper stages, (I) the belfry and its openings, with the caps and shafts in the mid-wall work.

(A) In their general form the majority of these towers are of a tall and slender shape, and this has come to be accepted as typical. On the other hand most Norman towers are of comparatively broad proportions, and the Saxon type is often set against the Norman as the slender against the sturdy. It is well to note therefore that Norman examples both in England and in the Duchy are sometimes of elongated proportions. Between Caen and the sea there is a group of these, of which Lion-sur-mer, Luc-sur-mer, and Ver, are characteristic specimens, and these can be

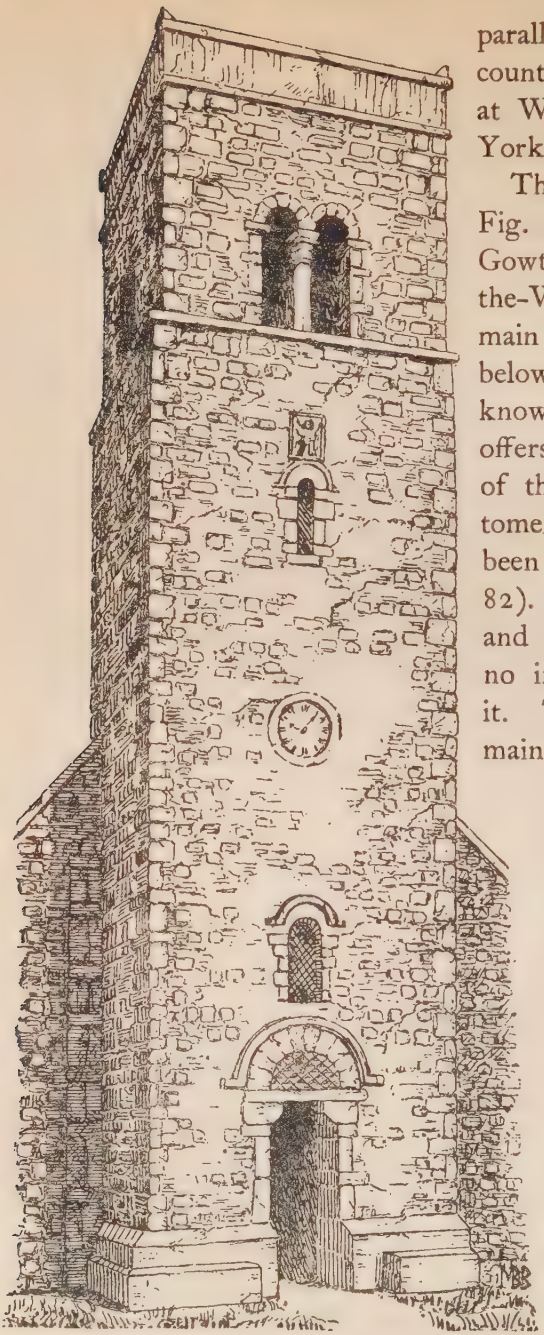


Fig. 87.—Western tower, St. Peter-at-Gowts, Lincoln.

paralleled in our own country, as for example at Weaverthorpe on the Yorkshire Wolds.

The example shown in Fig. 87 is St. Peter-at-Gowts, or St. Peter-at-the-Watercourses, in the main street of Lincoln below the hill. It is a well known monument and offers the characteristics of the group in an epitome. These have already been indicated (ante, p. 82). The tower is tall and narrow and there is no intentional batter in it. The walls are in the main vertical though as a fact they draw in a little in a curious fashion just under the string course, as can be seen in the drawing. The western doorway and the lower openings of the tower are of a rather advanced character, and possess, for example, projecting hood moulds. The double belfry openings how-

Fig. 88.—Tower of Clapham Church, near Bedford.

(To face p. 160.)

Fig. 89.—Arcading at base of Western Tower, Branston, Lincolnshire.

(To face p. 161.)

ever are of the type already referred to as giving to this group of structures their distinguishing character, while the tower arch and other features seen in the interior are of Saxon type.

The simplicity and rugged strength of these towers make them at times very imposing, and this effect is perhaps most marked in the case of a midland example the tower of Clapham church near Bedford, Fig. 88.

(B) A very limited amount of what may be termed architectural treatment is lavished on these austerely simple unbuttressed walls. A plinth is sometimes present in one of the forms noticed on p. 85 but ex hypothesi the special group under consideration is devoid of either pilaster strips or long-and-short quoins. Considering how commonly these details were employed in the later Saxon period when these towers must have been in building this is not a little curious. The only architectural feature that breaks the absolute plainness of the walls is the horizontal string course. Only one of these 'Lincolnshire' towers, Great Hale near Sleaford, has no string course or other break in its perfectly plain outline[1] but in every other case in this group one at least is found, its most usual position being just beneath the belfry openings. A second is less common. Above each string course the tower sometimes contracts but this is not universal. St. Andrew, Bywell, by the Tyne, and Monkwearmouth (Fig. 79, ante, p. 142) are examples to the contrary.

Enrichment by means of arcading is not unknown. Tasburgh, Norfolk—if it be really Saxon—displays this in somewhat timid fashion, but the example par excellence is that of Branston near Lincoln, where arcading of somewhat advanced Romanesque character occurs on the lower stage of a tower that shows everywhere else only the normal features of the type. It is shown in Fig. 89.

[1] Deerhurst; and St. Michael, Oxford, are also quite plain, but they do not belong strictly to this group as they have distinct pre-Conquest detail.

(C) With regard to the finish at the top of the towers our evidence is but scanty, and there is no reason to suppose that any one scheme was in universal use. Only one Saxon tower has preserved its ancient finish, and this is Sompting in Sussex where a form of cap common in Germany and called the German Helm is employed. The sketch, Fig. 90 (A), will explain the form better than a description. One of the other towers has a distinct indication that this finish was once applied to it. This is St. Benet, Cambridge, which has Saxon features in the form of long-and-short quoins up to the very summit of the present structure, and we should at first sight conjecture that it had in Saxon days what it possesses now, a flat top like that of some Early Norman towers in the Duchy such as Lion-sur-mer to the north of Caen. If we examine the view of the upper part of it however in Fig. 90 (B) the central example on the plate, we see that a pilaster strip starting high up from a corbel ascends in the centre of each face, and a comparison with Sompting indicates that this strip once ran up to the point of a gable, and that the finish was a German Helm.

There are some indications at Corbridge that the tower had its eastern and western walls surmounted by gables carrying between them a roof of saddle shape. A pyramidal cap of stone is the finish of many early towers, as of the Irish round towers and of that at Ver in Normandy, and a very interesting example survives in our own country in the square Norman tower of the oratory on Priestholm, or Puffin Island, just at the south-eastern extremity of Anglesea, Fig. 90 (C). This is a form of vaulting, the stones being placed in horizontal layers but in encorbelment, and requires nice construction to which our Saxon builders, inferior in this respect to the Irish, were probably not equal, so that it is doubtful if this should be included among possible terminations to Saxon towers.

(A) Sompting, Sussex. (B) St. Benet, Cambridge. (C) Priestholm (Puffin Island), Anglesey.

Fig. 90.—Upper parts of two Saxon towers and one of Norman date.

(D) A western door of entrance occurs or has left its traces in about half the towers. These doors are of different types and exhibit some very characteristic Saxon details. The exceptional towers—for there must be observed this distinction between the fifty-odd towers that

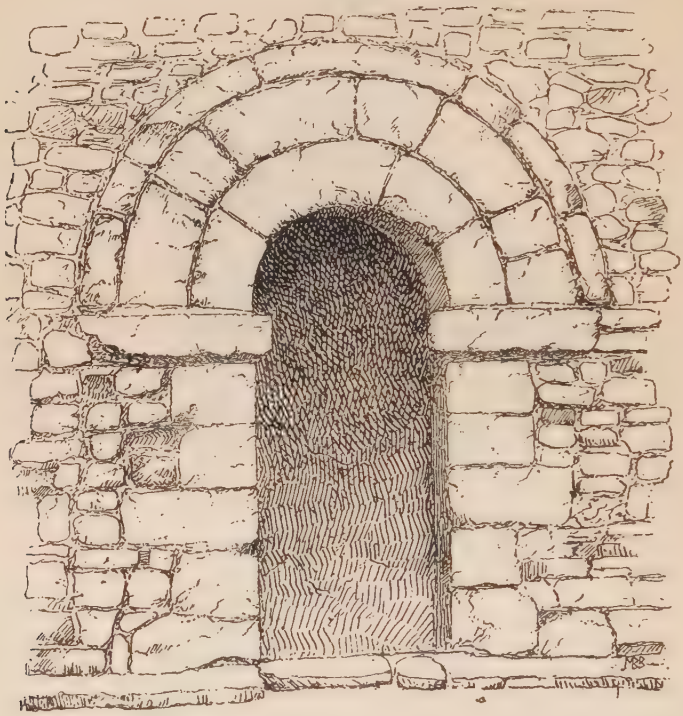


Fig. 91.—Western doorway of tower, Clee, Lincolnshire.

are Saxon only in form and in the character of their belfry openings and the few examples that have also long-and-short work and pilaster strips,—the exceptional towers have doorways in which the use of the pilaster strip at the sides and round the arch is common, but those of the 'Lincolnshire' type have sometimes developed Romanesque features such as angle shafts and recessed arches. The doorway at Branston may possibly be a later insertion, but

Kirkdale[1] and Kirk Hammerton, both in Yorkshire, are genuine Saxon work. The scheme of them was shown in Fig. 49 A and B, ante, p. 98. A more characteristic form of doorway is found in a few examples in the northern division of Lincolnshire, and this feature is of interest as it cannot be exactly paralleled elsewhere. Fig. 91 shows a good example from Clee near Grimsby. There is a simple dignity about this massive portal which agrees with the general character of this type of tower. It should be explained that the imposts project 2 in. to 3 in. from the wall face and the outer order or hood mould is flush with them. The middle order is recessed 2 in. below this, and the inner, which corresponds to the wall face, is ½ in. lower.

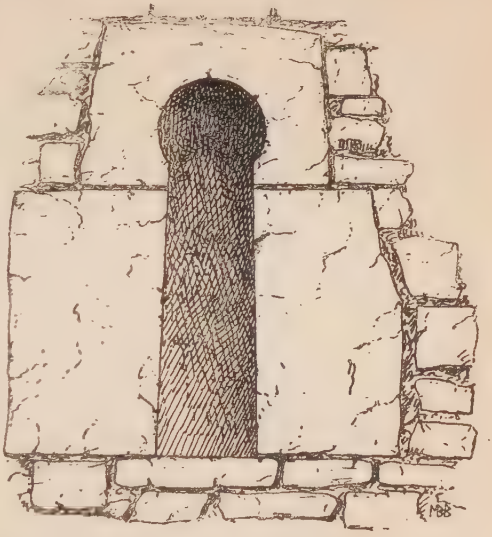


Fig. 92.—Keyhole loop, west face of tower, Clee, Lincolnshire. Height, 2 ft. 8 in.

Much more rarely than on the west do we find doorways on the lateral faces of Saxon towers. Porch-towers, and others of an exceptional kind to be afterwards noticed, possess these, but they are not found in the particular group now under review.

(E) The smaller lights in the lower stages of the towers are ex hypothesi not of the double-splayed Saxon form but are usually internally-splayed loops with narrow outside apertures the head of which, after a fashion that is Roman and Irish and

[1] The doorway at Kirkdale is really the west door of the church, not a tower door, but it is useful for comparison.

Norman as well as Saxon, is cut out of a single stone. One particular form of aperture has received the name of 'keyhole' from its form shown in Fig. 92. It occurs in the same district as the doorways last mentioned, but it is found also exceptionally in Oxfordshire, where the aperture in some mid-wall slabs in the centre of double-splayed windows in the tower of Langford church has the same outline.

(F) On entering the tower our attention is directed first to the arch opening from its ground story into the body of the church. This is generally, but by no means always, of lofty proportions, and it seems to have been always in old times open and not closed by a door. There is an exceptional arrangement at Leathly, near Otley, Yorkshire, in a tower which lacks the distinguishing marks of the present type, the double belfry openings, and should only be included doubtfully in any pre-Conquest list. Here there is no tower arch but a doorway 3 ft. 4 in. wide, closed with an iron-bound door, the sill of which is 3 ft. from the floor of the church. There is an external western door to the tower but it is doubtful whether it is original. These points are of significance in connection with the question whether these early towers were used like the Irish round towers for purposes of defence. It may be said generally that there is not the smallest actual indication of such a use. Since half the towers have western doorways to the exterior on the ground level, and all but Leathly have open tower arches, an enemy could always gain the ground story of the tower and burn or smoke out those on the upper stages.

One exceptional tower arch, that at Corbridge, has already received attention. Many fine simply turned arches devoid of enrichment occur in the 'Lincolnshire' towers and look almost Roman in their unpretending dignity. Clee possesses a fine one measuring 16 ft. 8 in. in height by a width of 6 ft. 9 in., which matches in character the western door

already illustrated. St. Peter-at-Gowts exhibits a still more imposing portal of a height of at least 20 ft. to the crown. Many of the round towers of East Anglia, some of which seem of pre-Conquest date, are remarkable for their very lofty tower arches.

Plain chamfered imposts are almost universal, but it may be noted that in one or two instances Roman worked stones are used for the imposts of these arches. Such is the case at Warden, by the Tyne, Northumberland, and likewise at Alkborough, Lincolnshire, where the jambs of the arch have also Roman moulded stones for a base. The method of construction with through-stones noticed ante, p. 96, is fairly common, but there are cases in which an arch is constructed with facing stones and rubble filling, and yet seems to belong to the pre-Norman epoch. The jambs have in many instances plinths of simple section, like D in Fig. 31, ante, p. 85, which exists at Clee. As a rule the imposts and plinths are not returned along the lateral walls, but instances of this occur.

(G) Internal fittings comprise those arrangements which seem to show that the tower was used for a dwelling place, though not, as we have seen (vol. 1, p. 334), necessarily for the priest.

It has been already suggested (vol. 1, p. 359) that the occupant was as a rule the ostiarius or sacristan, who kept the doors, safeguarded the relics, and attended to the bells of the church, being bidden in some cases to 'ly over nyghtes therin.' A lodging on the first story of the tower would keep him in touch with the bells, and give him a place of vantage from which to command the altar with its treasures at the other end of the building. In two existing Saxon towers presently to be noticed, Deerhurst and Bosham, there are small apertures in the eastern wall of the tower that were probably intended for the purpose of affording a view in this direction.

One of the most cogent pieces of evidence of former habitation in these chambers of pre-Conquest towers occurs at Skipwith, Yorks, where in the eastern wall of the ringing chamber is a shallow recess 3 ft. high and 3 ft. 5 in. wide, the sill of it about 2 ft. from the present floor. Its depth is 6 in. The jambs are formed by round shafts each in a single stone with square abaci, quite of pre-Conquest type. It is to be

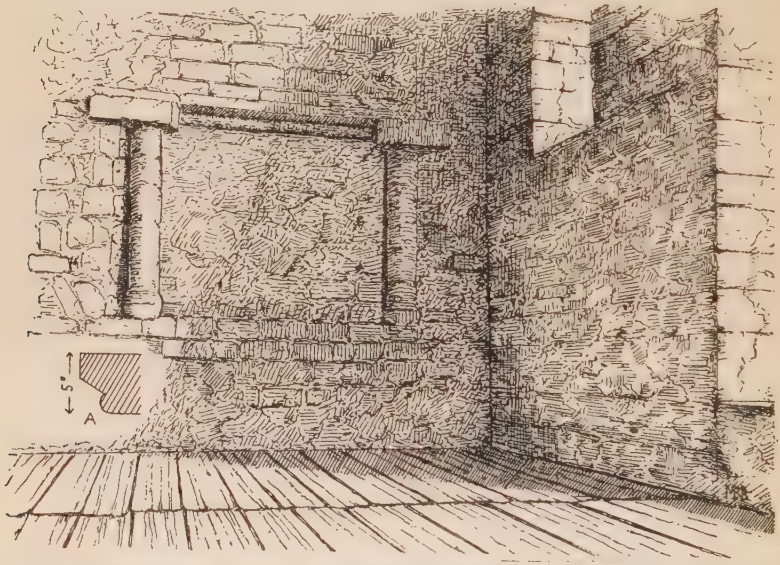


Fig. 93.—Recess in chamber in the western tower at Skipwith, Yorkshire. At A is the section of the lintel of the recess.

noted that a small double-splayed window has been specially formed in the southern wall of the tower just where it would throw light on whatever was kept in, or used at, the recess. The absence of any parallel elsewhere makes it difficult to conjecture the purpose of the arrangement. It may have been a receptacle for a relief, such as a carved rood, or a panel like those now preserved in Chichester cathedral. See Fig. 93. In one of the upper stages of the tower at Deerhurst there are two aumbry-like recesses in the north and south walls that are also signs of earlier habita-

tion. They measure about 2 ft. in height by a width of 18 in.

The various openings, which in some of these towers are pretty numerous, are important as evidence for the manner in which the structures were used in the olden time. The prominence assumed by the western forebuildings of German churches has already been noticed (ante, p. 53 f.) and some of our Saxon western towers, such as those of Deerhurst, Barnack, and Brixworth, seem to have possessed a similar importance in relation to the whole structures of which they formed the frontispiece. The arrangements in the great majority of the towers were much simpler, but in almost every case the adjunct seems to have been employed for other purposes than merely for the accommodation of bells.

There are at present stories in the towers formed at different levels by wooden floors, the beams of which rest sometimes on projecting corbels of mediaeval date, as at Bardsey, Yorks. Only in the case of one existing Saxon tower does the lowest stage possess a contemporary stone vault.[1] This is at Monkwearmouth, but the vault here belongs to the earlier porch and not to the tower. In every other case the lowest stage of the tower, readily accessible through the western door or the open tower arch, is or was only roofed with wood. Access to this and to the stages above is gained by wooden ladders, some of which (not of Saxon date) are excellent specimens of rude but solid wood work. The first story is generally now the ringing chamber, and from this into the church there commonly opens a doorway which as at present placed is a somewhat puzzling detail.

These upper doorways in Saxon towers are features so familiar as to be almost universal, but they are in no connection with anything to be seen at present within the churches.

[1] With later mediaeval vaults inserted in Saxon towers, as has been the case at Barnack, we have of course no concern.

They cannot be regarded as merely apertures to afford a view of the interior, for at Deerhurst and Bosham there exist by the side of the doorways small openings or squints which seem to have had this very object (Fig. 94). The purpose of the doorways is clearly to serve as means of entrance and exit, and they might conceivably be designed to afford access by means of a ladder to the chamber in the tower. At Monkwearmouth, where the porch below is vaulted, the only access to the chamber above, which was part of the original porch, is by a ladder up to this doorway shown in the sketch, Fig. 83, ante, p. 147. It is possible that some of the doorways in the towers generally were used in the same manner, though this can only have been the case when they were at no great height above the ground. In Fig. 95 are given outlines to scale of the internal features at the western end of the naves of three characteristic examples, (A) Bosham (B) St. Peter-at-Gowts, Lincoln, and (C) Deerhurst. Bosham and Deerhurst, which show the small squints for inspection, have the corresponding

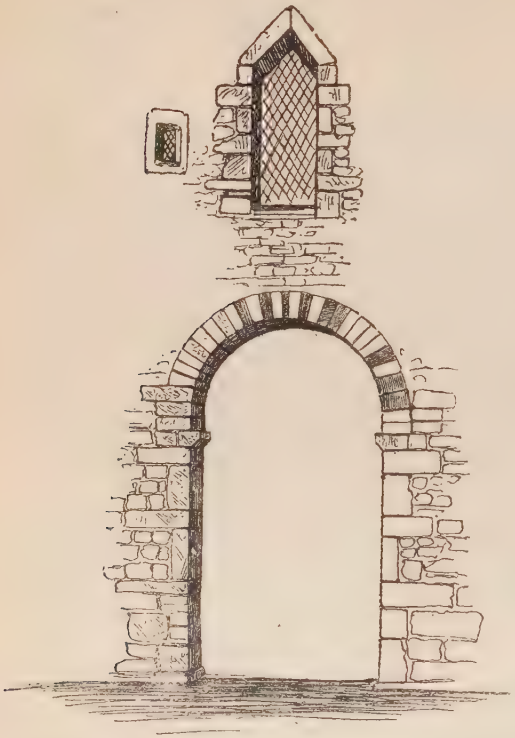


Fig. 94.—Western end of nave (eastern face of tower), Bosham, Sussex. From a sketch by the late J. T. Irvine.

doorways on lines respectively 18 ft. and 16 ft. above the floor, but in the Lincoln example where the tower arch is very lofty the height is 26 ft., and a doorway at that elevation can hardly have been used for access from the floor of the church.

There are two other suggestions that have been made about these doorways. One is that they communicated

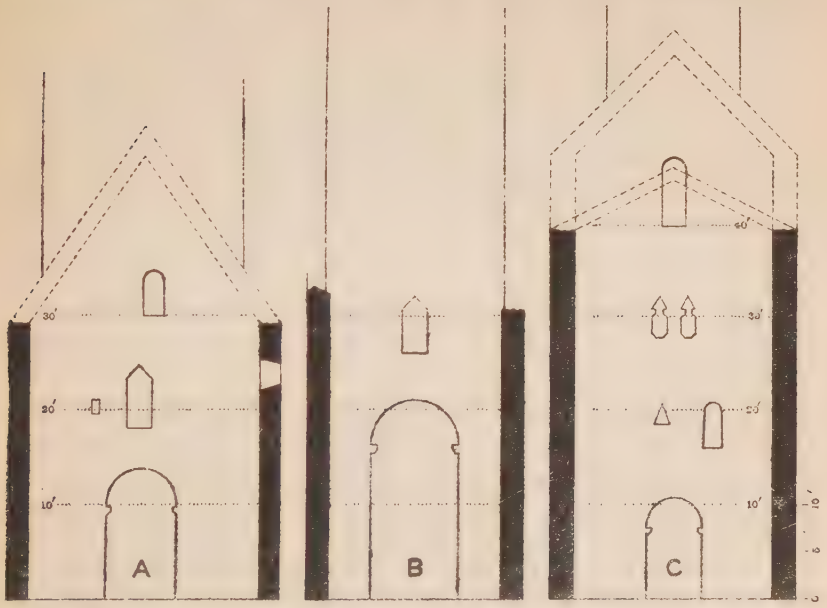


FIG. 95.—Outlines of western ends of three Saxon Churches with western towers, showing openings in the eastern faces of the towers.

with spaces between the ceilings and the outer roofs of the churches. Chambers between under and upper roofs are as we have seen features in some of the Irish stone churches of native origin (see Fig. 13, ante, p. 26) and occur also over chancels in Norman work in England, as at Darenth, Kent; Tickencote, Rutland; and Compton, Surrey. There is, as we shall see in connection with Barton-on-Humber, evidence of this arrangement in some Saxon examples where the side walls of the church were

low, but in the case of large churches with lofty side walls the doorways in question would not be at a sufficient elevation. Unfortunately there are very few examples where a church with a western tower has preserved the original windows in the north and south walls of its nave. Avebury, Wilts, possesses original Saxon nave windows in two stages, round-headed internally-splayed openings, with apertures 3 ft. high, on a line 9 ft. from the ground; and internally-splayed circular lights in the upper part of the walls which were of great proportionate height. There is here no Saxon western tower, so we cannot judge from the evidence of tower openings whether the church had an intermediate floor, with an upper chamber lighted by the circular windows and approached by one of these doorways from the tower. There are many instances on the other hand in which it is clear that these enigmatical doorways did *not* open into such an upper chamber, and this explanation would probably only apply in a limited number of cases.

The third suggestion is that they afforded access from the tower to wooden galleries erected against the western ends of churches. It appears that this has been the case at Deerhurst, where some moulded stones that project from the western wall of the nave at a level just below the doorway may have had some connection with a gallery, and on the whole this theory may be accepted as the explanation which probably covers the largest number of instances.

There are some towers which possess similar doorways to those under question at a much higher level, and about these there can be little doubt that they opened into spaces between an upper and an under roof. At Bosham (A) Fig. 95, the height of the nave walls, about 29 ft., and the position of the circular lights in the north wall,[1] seem to point to this explana-

[1] It is a question whether the north and south walls of the nave at Bosham are Saxon, or are due to rebuilding when the pointed arcades giving access to the later aisles were constructed. The circular lights are

tion of the upper doorway. At Deerhurst too, if we assume that the line of the original external roof is approximately indicated by the weather-tabling on the east face of the tower, as shown by the upper dotted lines in the drawing (C) Fig. 95, we get the high doorway into a position suitable for the same purpose.[1]

For what purpose these upper chambers were used is another question, into which it would not be advisable to enter in this place.[2] Nor can we discuss here the exact intention of certain chambers in western towers that open to the church not by a simple doorway or a squint, but by an ornately treated double or triple aperture. Deerhurst has one of these (C), Fig. 95, and there is another at Brixworth, Fig. 153, postea, p. 252. At Deerhurst the chamber in question is on an intermediate story between the lower and the upper doorways, and has in it the two aumbry-like recesses already noticed. The opening towards the church exhibits features which will be discussed on a later page. At Brixworth, where there is no doorway above the tower arch, the chamber is much lower. These chambers were evidently used for more dignified purposes than the mere lodging of the church officer, and we are reminded of the chambers that accommodated personages of note in the western forebuildings of certain German churches, such as the Minster at Aachen, Gernrode, and Eginhard's basilica at Seligenstadt.[3]

of a form known in Saxon architecture, and in spacing they are out of relation to the arcades below. Hence they may be accepted, with reserve, as original. Bosham church is noted postea, p. 327.

[1] The present roof, of the Perpendicular epoch, cuts as will be seen right across the doorway. The weather-tabling mentioned in the text, though it may belong to a later mediaeval roof, seems to give a suitable line for the Saxon one.

[2] There is an indication of the possible uses of the various parts of these towers in Mr. Micklethwaite's paper on Saxon churches in the *Archaeological Journal*, LIII.

[3] *Repertorium für Kunstwissenschaft*, XI, 399.

We have not completed yet the study of these tower apertures, for they occur on other faces besides that turned towards the church, and sometimes indicate the presence of adjuncts built up against the towers. Thus at Deerhurst there is a doorway 25 ft. above the ground on the western face, that looks as if it had opened once on to the roof of some western adjunct to the tower. At Netheravon in Wiltshire there is a western tower, late Saxon in general style but with some Norman features, that has distinct indications of the existence on the western, northern, and southern faces of former adjuncts, the purpose of which is problematical. The plan, Fig. 96, shows the attachment of these lateral walls which are now broken away. On the northern face, about 17 ft. above the ground, there is an opening cut like a doorway, but only 4 ft. 9 in. high, that may have given on to the roof of one of these subsidiary buildings.[1] At Warblington, Hampshire, a square tower of rude workmanship now embedded in a beautiful church of later date, has doorways of this kind on the north, south, and west faces at a height of about 15 ft. from the ground.

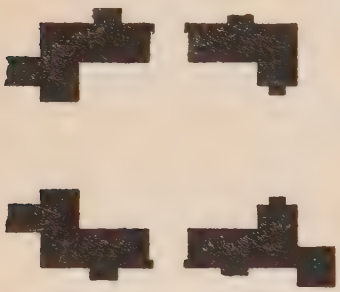


Fig. 96.—Netheravon Tower.

Such openings when on the plain faces of towers may always indicate the former existence of some adjunct, but the case is very different when the face of the tower below the opening is somewhat elaborately enriched. This is the case at Earls Barton tower, and will be discussed presently in connection with that most remarkable of Saxon monuments.

(H) The usual means of access to the upper stages of these

[1] There is a paper on Netheravon by C. E. Ponting, F.S.A., in the *Wiltshire Magazine*, 1901, from which some features of the plan have been derived.

towers are as we have seen wooden ladders, there are however four examples of spiral staircases of stone enclosed in half or three-quarter round turrets built up against the western wall of square Saxon towers. The instances are Brigstock and Brixworth, Northamptonshire; with Hough-on-the-Hill by Grantham, and Broughton near Brigg in Lincolnshire. The general appearance of the turrets can be seen in Fig. 149, postea, p. 246. One of the towers of the Lincolnshire group, Great Hale, by Sleaford, is exceptional in that it possesses a narrow turret stair in the thickness of the wall at the north-eastern angle of the tower. The stairway is only 1 ft. 4 in. wide, and the construction is of a very rude and tentative kind. The triangle of masonry in the corner was not quite large enough to hold the cylinder for the stair, and the tower bulges a little on the eastern face to give it room. The plan at the belfry stage is shown in Fig. 97.

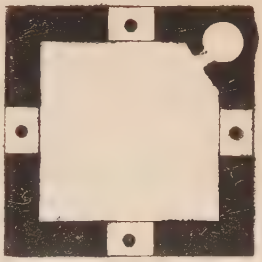


Fig. 97.—Belfry Stage, Great Hale, Lincolnshire.

(I) The belfry stage is the most important part of the whole tower, for here are exhibited the features which give this type of monument its pre-Conquest stamp. The general character of the double belfry opening with its through-stone and mid-wall shaft has been already made clear, and it only remains now to give some attention to the remarkable forms we meet with in the work, especially in the case of the caps.

The mid-wall shafts are generally plain and straight-sided,[1] without tapering or entasis, in section circular or octagonal, and sometimes oblong—that is, measuring more in the direction of the thickness of the wall, a peculiarity agreeing with a feature of some of the caps to be afterwards noticed. In most cases the shafts are provided with capitals, and less frequently

[1] At Barton-on-Humber and Glentworth, Lincolnshire, there are enriched shafts (not balusters), but these are exceptional.

with bases, with which feature time has dealt more hardly than with the more sheltered caps. The antiquity of many of the existing capitals is doubtful, and in what follows dependence has only been placed on those examples that bear a decided imprint of age.

The capitals, a selection of which is shown in Fig. 99, p. 180, may be roughly grouped under the two headings, 'Cubical' and 'Volute' caps, and appear to be genuine specimens of native English carving of the later Saxon period. There is every appearance that they were made for the places they occupy, and in a large number of instances they are only decorated on the outer face and part of the sides, so that we can imagine them being actually carved in situ. There is no order of historical succession to be made out in the forms and motives, for though some are primitive and others advanced, the ruder examples are sometimes to be found in towers that would be placed late in the group. In dealing with the caps however they may, for convenience sake, be ranged according to an assumed scheme of development, the most primitive being first considered.

No. 1, from St. Mary-le-Wigford, Lincoln, might seem of dubious antiquity did not the same form occur in the undoubtedly ancient archway, clearly at first a chancel arch, between the tower and church at Broughton, near Brigg, in the same county, Fig. 128, postea, p. 213. It represents a rude method of cutting down the square of the top of the cap to the octagon of its base, and in a modified form we find the same device at Boothby-Pagnell, Lincolnshire, where, however, the chamfers are hollow. Some caps at Marton, near where the old Roman road from Lincoln to Doncaster crosses the Trent, exhibit a somewhat helpless procedure by which the square of the abacus is cut down to the round of the top of the circular shaft by starting to slope the sides away like an inverted pyramid, and then rounding the corners off till the form becomes that of an inverted

cone. This may be regarded as an uninstructed attempt to deal with a problem that is perfectly solved in the normal cubical cap, which is represented in examples of undoubted antiquity at Clee, near Grimsby (No. II). This cubical cap, formed by the interpenetration of a hemisphere and a cube, is probably, as we have seen, an importation from Germany, where the form becomes common in the eleventh century. In its distinctness and decision of shape and perfect fulfilment of conditions the mediaeval cubical cap is as good as any tectonic form of the Greeks, and is the most successful independent invention of the kind that we owe to the middle ages. The development of the later subdivided or scalloped cap from the simple cubical type can be followed in the Lincolnshire belfries.

At Rothwell, in the Caistor district, we find mitred cubical caps, shown in No. III, but the tooling on the stone suggests that they may date from a restoration of half a century ago. Such mitring, due to a desire to accentuate the divisions of the mass, would be sure to occur as a stage towards its further partition in the subdivided cubical caps shown in Nos. IV and V. The type in which each face of the cap is bounded below by two semicircles instead of one occurs in ancient work at Branston, by Lincoln (No. IV). These caps are elegant and well-wrought examples. The further subdivision into three, by which we reach the shape of the familiar scalloped cap, is represented in the tower of the well-known pre-Conquest church of Bracebridge on the outskirts of Lincoln.

Fig. 98 shows this church and tower from the south east. A more modern south aisle has been added to the Saxon nave, the long-and-short quoins of which are seen at its eastern end where the aisle wall joins it, and it may here be noted that in some cases the adjacent quoins of a nave will show long-and-short work while the quoins of the tower have no indication of such treatment. This is the

case here; at St. Peter-at-Gowts; at Rothwell, Lincolnshire, and other examples in that county. It might be argued from this that the tower was added at a later period to a pre-existing church, but against this is the fact that the tower arch and the doorway which opens above it in the western wall of the nave presuppose in each case a tower. It is hardly credible that these features, which are on the whole extremely constant ones, have been in each case inserted in the western walls of originally towerless churches. When towers have in this way been added to earlier churches, as at Staple and Westwell in Kent, the older openings in the end wall betray the fact of the alteration. In the drawing of Bracebridge the square tower with its belfry openings appears at the western end. In the westernmost of these openings, not seen in the drawing, we find the cap given in Fig. 99, No. VI, in which the middle section of the front or western face of the cap is enriched in the somewhat bizarre fashion shown in the drawing. It is a good illustration of the curious mixture of normal with fanciful motives which we find in these caps, and which betrays the hand of ingenious, but half-taught, carvers at work on forms imported from abroad.

The series just noticed represents a continuous evolution, in which a form produced originally by the exigencies of construction—or, to use a convenient term familiar in Germany, a tectonic form—is gradually modified by sub-division and by the defining and accentuating of parts. The two dimensions, the square above and the circle below, depend upon structure, and the artistic problem lay in the fitting transition from the one to the other. The transition is, as we have seen, worked out in the Lincolnshire belfries in different ways, though we are not to conclude that the simpler and ruder forms are earlier in actual date than those more artistically advanced.

Hitherto we have dealt with caps of the cubical type. Those which are distinguished by the use of the volute

FIG. 98.—Bracebridge Church, near Lincoln.

(To face p. 178.)

might seem at first sight more artificial, as the volute itself is obviously a borrowed form. The volute however, as used in these belfries, is only a means of decorating a shape arrived at in the process of construction. The construction in this case is not the same as in that of the normal cubical cap. In the latter, the diameter of the hemisphere that interpenetrates with the cube is equal to the *diagonal* (in plan) of the cube. In the caps now before us (see Nos. VII and VIII) the lower part of the cube is worked into the form of a hemisphere of a diameter equal only to the *side* of the cube. The smaller hemisphere is carried round in its full circumference for about half the height of the cap, at which point the corners of the original cube are left projecting. These projections have then to be dealt with, and they are brought down to meet the hemisphere in various ways, of which that shown in No. VIII is the most common. The cap from Bracebridge, south opening (No. VII), is notable for its originality. The shaft supporting it possesses moreover about the best developed base that occurs in the belfries, the profile of which is given in the drawing. In the Glentworth example (No. VIII), and many others of which specimens are given in the illustrations, the projecting corners of the cube are worked into volutes, while the central space on each face between the curls is left plain, as in No. VIII, or treated with a drop like the so-called Tau of Early Norman caps, or some other ornamental motive. Some of these volute caps introduce us to a more elaborate decorative treatment. At Scartho, near Grimsby (No. IX), the lower part of the capital is surrounded with a ring of upright leaves turned over at the top after a fashion represented in the Early Norman crypt at Lastingham, as well as in the crypt of Ste. Trinité, at Caen, Normandy. The richest in ornamentation of all is the cap from St. Peter-at-Gowts, south opening (No. X), where there is considerable elegance of design and sharp and delicate cutting. The cap from the upper stage at Barton-

on-Humber, south opening (No. XI), is, on the other hand, clumsy and unpleasing, though undoubtedly original in treatment. It passes off into the octagonal shaft which it crowns, without any neck moulding, though this is almost universal in other examples.

The most interesting set of caps in any of the towers is to be found at Great Hale, near Sleaford, where there are four, all different and all fanciful without being extravagant. The caps are only carved on the outer faces, and they have the peculiarity that the abacus measures rather more in the direction of the thickness of the wall than it does the other way. This gives them some slight approach to the corbel capital, branching out to take the width of the masonry, specimens of which from different regions were shown in Fig. 26, ante, p. 64. In shape the Great Hale examples are a sort of combination of the cubical with the volute form, and they are peculiar in the reeding with which the lower part is adorned (Nos. XII, XIII, XIV, XV).

The last example No. XVI, from the northern face of Glentworth tower, shows the extreme limit to which is carried the principle of corbelling out the cap to correspond with the thickness of the wall. This cap measures 11 in. on its face, but the side extends to 16 in. by a curious tongue projecting at the back. This extension is in none of the examples under consideration carried far enough to make it possible to dispense with a through-stone, but the corbel cap that is cap and through-stone in one does occur, though rarely, in our English work (Fig. 26, IV and VI, ante, p. 64).

In connection with the subject of moulded caps an additional word may be said upon the treatment of imposts in Saxon building. These imposts, on the piers of chancel and tower arches and in the form of through-stones in belfry openings, are common and at times characteristic features. The most usual form of the plain chamfer is equally well represented in Norman (Fig. 47, ante, p. 96) and even in Roman work (Fig.

1, ante, p. 4). The hollow and the quirked chamfer introduce varieties. The former does occur as an unimpeachable pre-Conquest feature in the window in the east wall of the nave at Wing, Bucks, and appears in the chancel at Deerhurst and the belfry at St. Peter-at-Gowts, Lincoln. It occurs, too, on

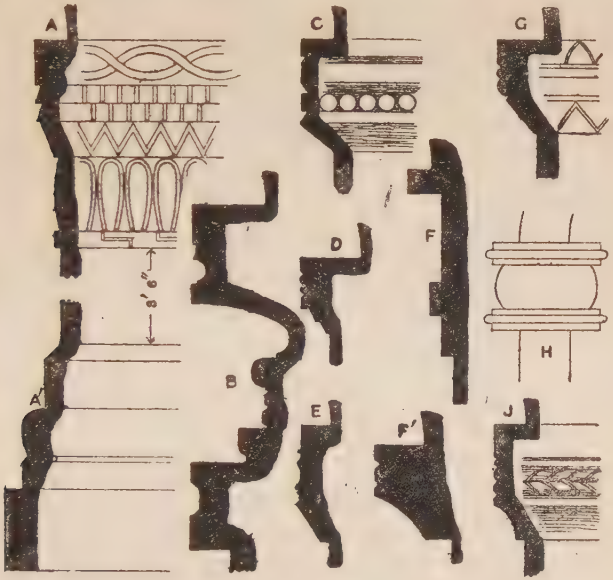


FIG. 100.—(Scale about $\frac{1}{16}$ of nature.)

A, A'. Barholm, Lincolnshire, jamb of south door of nave.
B. Barnack, Northants, tower arch. (See Fig. 122, postea, p. 206.)
C. Coln Rogers, Gloucestershire, chancel arch.
D. Howe, Norfolk, tower arch.
E. Deerhurst Chapel, chancel arch.
F. Repton, Derbyshire, pier of vault; F', wall-cornice.
G. Pattishall, Northants, chancel arch.
H. Corhampton, Hants, north door of nave.
J. Daglingworth, Gloucestershire, south door of nave.

one of the string courses at Earls Barton tower. Of the quirked chamfer the writer knows of no instance in work that is certainly Saxon, and the examples of it in towers of the 'Lincolnshire' type may be due to a Norman chisel. On the other hand, imposts in the form of huge trapezoidal blocks, as at Wittering, Northants (Fig. 59, ante, p. 108), and Market Overton, Rutland (Fig. 46, ante, p. 96), are unmistakably Saxon, as likewise those apparently formed of superimposed slabs

(Barnack, Northants, Fig. 100, B, and postea, p. 206; Miserden, Gloucestershire, Fig. 172, postea, p. 327). Moulded imposts must be judged by the character of the work and its surroundings. A few specimens are given in Fig. 100. That at Corhampton (H) from the blocked north door of the nave is, on a small scale, like the grand impost of the tower arch at St. Benet, Cambridge. Deerhurst Chapel (E) exhibits the timid Saxon grooving. The other examples are more advanced, but even that at Coln Rogers, Gloucestershire (C), is in Saxon surroundings, and the arch and jambs are constructed with through-stones.

The most elaborate example of impost ornamentation occurs in the narrow doorway in the south wall of the nave at Barholm, Lincolnshire (A). The Saxon character of the work has been questioned, but the pre-Conquest date of the doorway is attested by the fact that above it there rises a portion of a Saxon pilaster strip, occupying the same position, just above the crown of the arch, that pilaster strips occupy in the undoubtedly Saxon examples of Corhampton, Hants, and Stanton Lacy, Shropshire. (See ante, p. 89.) The ornamentation on the top of the jambs and on the imposts is timidly incised, and agrees with a Late Saxon rather than a Norman date. The base moulding, which runs along the south wall of the nave, is of rather more orthodox character. The profile of it is given at A′.

The towers of the 'Lincolnshire' type hitherto dealt with are all of the square form. In East Anglia and Essex the characteristic plan is circular, the tower being embedded so to say for some part of its circumference in the western wall of the church but showing its completely round shape above. The significance of the form has been a good deal discussed,[1] but there is really no mystery about

[1] There are papers on the Round Towers of this region in *Archaeologia*, XXIII; *Journal of Archaeological Association*, XXI, XXXVII, XLIV, XLVI, XLVIII, ; and on Saxon Architecture in Norfolk in the *Archaeological Journal*, VI.

it. The round form of church tower though characteristic of East Anglia and Essex is not, even as regards this country, peculiar to that region, while the form occurs often enough in other lands. The round tower attached to the basilica of S. Apollinare-in-Classe by Ravenna is probably the earliest existing round tower,[1] perhaps the earliest of all extant towers of any form, and the feature occurs elsewhere among the Ravenna churches. There are round towers on the Plan of St. Gall of about 820 A.D. and the form is frequent in Ireland from about the tenth century onwards, and overlaps into Scotland. In England there are round towers associated with Norman detail, as at Haddiscoe, Norfolk, and Little Saxham, Suffolk ; of Early English date, at St. Michael, Lewes, and Hythe, Kent ; and in the Decorated style at West Shefford and Welford, Berks. It seems best to take the simplest explanation of the form that offers itself, and to regard it as due to the want of freestone suitable for quoins or to the absence of time or skill for squaring it. The Irish round towers probably owe their form to the conditions of haste and pressure connected with the Viking descents, while the English round towers are generally in regions where the building material is largely flint, and good workable stone is rare. This is notably the case in East Anglia and Essex where accordingly these round towers are at home.

The absence of cut-stone details renders a decision as to the comparative date of these towers not always easy, but some of those in District III are almost certainly Saxon. Bessingham near Cromer, Witton by North Walsham, Great Ryburgh, East Lexham near Swaffham, Gissing by Diss, St. Julian at Norwich, Howe and Colney in the vicinity of the county town, all in Norfolk ; with Herringfleet, Suffolk,

[1] The basilica was dedicated in 549 A.D. but opinions differ as to whether the campanile is contemporary with the rest of the fabric. There seems no strong reason to the contrary.

have all pre-Conquest claims, but it must be noted that the double-splayed window which some of them present as their chief warrant is not so distinct a Saxon sign in East Anglia as it is in other parts of the country.[1] Bessingham and Herringfleet are the best attested, as they possess besides mid-wall shafts the peculiar Saxon strip-work as a framing to some of their belfry openings. The plans Figs. 101, 102 show the manner in which these towers are joined to their (originally) aisleless churches.

Fig. 101.—Plan of Witton Church, Norfolk.

The above are the principal points of interest about the particular class of monuments under notice, that is to say, the fifty odd towers of the 'Lincolnshire' type that have only their general form and their belfry openings of Saxon character. The exceptional towers to which reference has already been made exhibit, over and above the double belfry openings, such features as long-and-short quoins, pilaster strips, and double-splayed windows. The relation of some of them to the plan of the church to which they belong presents also some remarkable features.

The tower of Earls Barton church, Northamptonshire, figured on the frontispiece, is by far the most noteworthy architectural monument of the Saxon period. It is one of the few in which we can take an aesthetic as well as an antiquarian interest, for it represents an idea of some

[1] See the note on the index list of Saxon churches at the end of this volume.

grandeur carried out with great pains and elaboration. It is a useful object lesson in the artistic capabilities and shortcomings of the Saxon builder. It has undeniable greatness not only of actual size—the tower measures 68 ft. 8 in. to the top of the modern battlements by a width on the western face of a little over 24 ft.—but also of dignity of statement. The designer has made the best of the means at his disposal, and has employed most of the details available at his time in more exuberant fashion than in any other example about the country save perhaps the other great Northamptonshire tower of Barnack. Yet the effect

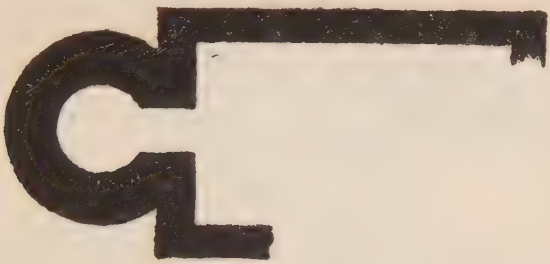


Fig. 102.—Plan of Bessingham Church, Norfolk.

is not truly architectural. The mass of the structure is fine but the details do not grow naturally out of the construction, nor on the other hand are they in accordance with the grammatical employment of such details in architecture generally. Care has been taken in small points such as the finish of the upright pilaster strips under the first string course, but the base of the tower was set out so carelessly that the southern side is about a foot longer than the northern, while the south west angle is decidedly acute and the north west correspondingly obtuse, see plan Fig. 103. Being however what it is, the most characteristic piece of Saxon work in the land, it is worth while examining it in some detail.

From a simple square plinth rise the walls of rubble work plastered. They have a thickness on the ground story of

about 4 ft. but they decrease in thickness by the sets-off as they ascend, till at the belfry stage just under the battlements they measure 2 ft. 6. in. The faces are enriched by vertical and horizontal members and the corners are strongly accented.

Fig. 103.—Plan of western tower, Earls Barton, Northamptonshire.

The vertical members are pilaster strips about 4 in. in width and they are joined at different heights by round or straight-sided arches arranged in a fanciful and illogical fashion. The round arches above the first string course have no sense in that position. The horizontal divisions are three string courses of which the first has a hollow chamfer, the other two being square in section. The quoins show pronounced long-and-short work, and it may be noticed that the 'short' pieces, or as they should rather be called the flat slabs, are not, as is often the case, cut back in a line with the 'long' or upright pieces so that the plaster would up to this line conceal them. The present plastering of the tower is modern but when the original plastering was complete these pieces would always have been apparent. It should be remarked that the eastern quoins of the tower are as marked as the western and come right down to the ground, though the more modern nave has been built up against them. This point, it will be seen, is of some importance.

The openings on the ground story are a tower arch that has been altered in Norman and in later times, and a characteristic western door of which Fig. 104 gives a view. The height to the crown of the arch is 8 ft. 7 in., the width between the jambs 3 ft. 3 in. The head of the doorway is on

the exterior cut out of two stones, but in the interior the whole head is formed in a single huge block. The jambs are

Fig. 104.—West doorway, Earls Barton Tower, Northants.

formed by large slabs set upright alternating with flat ones after a fashion we have come to know. On the north side the

slab which forms almost the whole height of the jamb is 4 ft. 6 in. high, 6 in. thick and 3 ft. 7 in. in depth. The enrichment consists in an outer order of upright pilaster strips square in section that are bent round above in the shape of the arch, and two inner mouldings half-round in section. The imposts and the plinths are plain square blocks, but upon the face and sides of the former there is an incised enrichment consisting in a plain sort of arcading only cut in to a depth of about $\frac{3}{16}$th of an inch. This arcading Mr. J. T. Irvine considered to be an afterthought of a Norman carver.

Above this doorway is an internally-splayed window of a common form that appears to be an insertion of Norman times, for it interferes with an older double window of the original work which is now blocked on the exterior, but which resembled the double opening that still exists on the southern face of the tower and is shown in the view (see frontispiece). These openings are double-splayed and the apertures on the western side were cut in mid-wall slabs in the form of a circle, while the apertures on the south are in the form of a cross with equal arms. It is worth noting that at East Lexham in Norfolk there is a mid-wall slab in a pre-Conquest opening in the tower that is also cruciform, only there the cross is stone and the background aperture, while at Earls Barton it is the aperture that is cruciform. Above each of these southern openings is an enrichment of narrow roll mouldings disposed about a central cross carved in relief.

On the intermediate stage where is the clock-face occur on every side but the north those enigmatical doorways apparently leading no whither, to which attention has been called. That on the eastern face of the edifice now gives access from the tower on to the comparatively flat roof of the nave. The roof of the Saxon nave was however of much higher pitch, and it has left its mark on the eastern face of the tower. The apex of the gable of the external roof reached a point corresponding with the middle of the height of the triangular headed opening

seen in the view above the clock-face. Hence the round-headed doorway on the eastern face of the tower opened at one time under the external roof of the church, and either commanded a view of the interior, or else communicated with a chamber between the external and the internal roof of the nave. (See ante, p. 169 f.) In any case the height of it above the floor of the church, about 25 ft., must have been far too great to admit of that access by means of a ladder which has been suggested as one way in which these doorways may have been used. The doorway on the southern face, measuring 7 ft. by 2 ft. 6 in., offers egress from near the floor of the ringing chamber, but the external aperture is at a giddy height above the ground, and there is no apparent sign of any gallery or platform to which it may once have given access. The treatment of the face of the tower below the opening seems to preclude the idea that any adjunct was ever built up against it. The interpretation of these external doorways which has been suggested in the cases of Deerhurst and Netheravon, ante, p. 174, does not here apply, and the purpose of the apertures is a puzzle. The triangular-headed openings on the stage above are curious. Like the round-headed doorways, they are cut straight through the thickness of the wall without any splay. This is usual in the case of doorways but quite abnormal in that of window openings, which especially in Late Saxon work are always deeply splayed either internally or on both faces of the wall.

We now come to the uppermost stage where the original work ends. Here is the bell-chamber, and for the free transmission of the sound there is on each face a group of five openings that are arranged in a fashion that gives us an interesting modification of the usual mid-wall work. The plan of the southern group of openings (Fig. 105) shows that the main part of the thickness of the wall is carried by simple square stone pillars, while the shafts that are intended to be seen are thrust forward to the external edge of the

opening, the result being an arrangement resembling in a rude form the duplicated shafts in Early Christian buildings spoken of ante, p. 62. The same arrangement may be observed below in the case of the double-splayed lights with cruciform apertures. Here shafts of the same kind as those in the belfry openings above are pushed out on projecting corbels and employed as mere ornaments not supporting anything. This is only another instance of the illogical treatment of features to which attention has already been called.

Fig. 105.—Plan of part of belfry stage, Earls Barton.

The form of these shafts introduces us to a new and characteristic feature of Saxon architecture. They are what are termed 'baluster shafts,' that is short columns banded at intervals and swelling out between the encircling rings. The shafts in the belfry here are abnormal for they are mostly oblong in plan instead of round, and in this case have the mouldings cut only on the external half. As a rule such shafts are round, and this is indeed part of their very nature for the earliest and most elaborate of them were turned in a lathe. Earls Barton tower having again brought us into contact with the feature we have been introduced to at Monkwearmouth (ante, p. 144, 5) we will in accordance with the plan here adopted follow it throughout the districts wherever it appears.

In dealing with the porch at Monkwearmouth we have had before us examples of the turned baluster shaft that are far more refined and delicate in workmanship than these at Earls Barton, and the relation of the two needs some explanation. As the whole subject is an interesting one it may be treated here in a connected manner, even though

this will involve a certain amount of historical discussion which is in strictness beyond the scope of the present chapter.

The mid-wall shafts dividing the belfry openings in church towers of the 'Lincolnshire' type are usually quite plain. The true Saxon baluster shafts do not as a rule occur in these belfry openings, but they are met with in some of the exceptional towers, as here at Earls Barton, or at Barton-on-

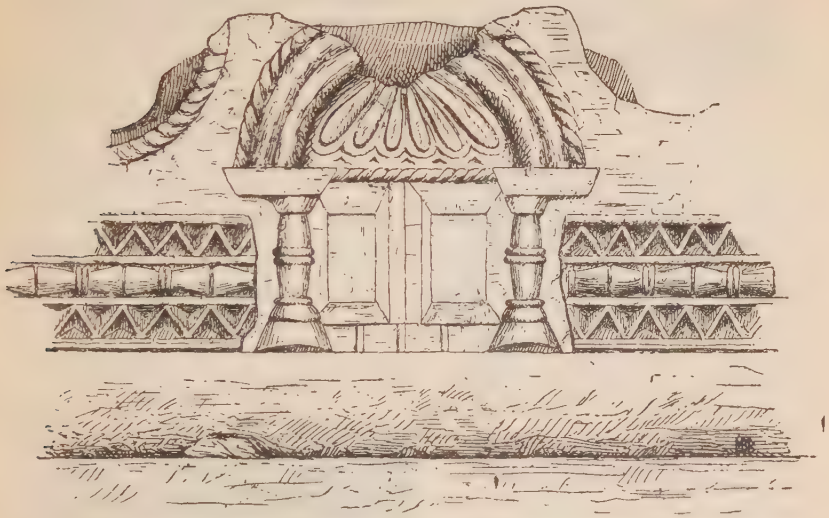


Fig. 106.—Part of Roman altar from Birrens, Dumfriesshire, showing baluster shafts and astragal.

Humber, and St. Benet, Cambridge. The accompanying drawings show some characteristic examples of these curious features of our pre-Conquest buildings, with which are connected some rather puzzling questions of origin.

We may start with the hypothesis that they are early features, partly because they occur in the western porch at Monkwearmouth, and partly because a comparison with Roman remains indicates an early period for their appearance. In technique and in a certain general character they resemble similar features in Roman work, though on the

other hand they are in a most important respect entirely unclassical. The Roman evidence comes mainly from the North, and appears in the form of representations of baluster shafts on a small scale on sculptured stones, such as altars. For example, on a Roman altar found not long ago at Birrens, Dumfriesshire, on the Scottish side of the great Wall, we find the detail shown in Fig. 106, where in the centre of the front a round-headed niche is flanked by two supports that evidently represent such balusters. A small Roman altar from Lanchester, in the cathedral library at Durham, exhibits a niche flanked in the same manner. These upright shafts, represented as used constructively, must be distinguished from similar motives, strung together in a sort of beading, and used to form continuous lines of enrichment, as on the Birrens altar, on each side of the niche in Fig. 106. It is probably incorrect to speak of these as 'rows of balusters.' They are really forms of the astragal ornament, though the elements of the pattern may at times have been influenced in form by baluster shafts. In a Roman stone built into the north wall of the north passage of Wilfrid's crypt at Hexham, there is an astragal of a simple type (Fig. 107), and the Birrens beading would be much the same, only that in the middle, at the thickest part, each bead is either cut in two or marked with a nick, it is not easy to say which. Now these same forms of supporting baluster and of beading occur in undoubtedly Saxon stones, many characteristic examples of which are in the Durham library collection. Fig. 108 shows one of several fragments

Fig. 107.—Astragal on Roman stone at Hexham.

Fig. 108.—Carved stone, with balusters, from the site of Wilfrid's Church at Hexham.

found on the site of the nave of Wilfrid's church at Hexham, and there is some reason to believe that these formed part of its enrichment. Here distinct balusters occur as ornamental motives, while there are other stones in the same collection with Saxon carving on them, which show forms of the beading above noticed. On a well-known stone in the porch of Jarrow church (Fig. 109) there is a row of little balusters, about $3\frac{1}{2}$ in. high, set upright, but curiously similar in shape, if we look at them in one way, to the elements of the horizontal beading on the Birrens altar.

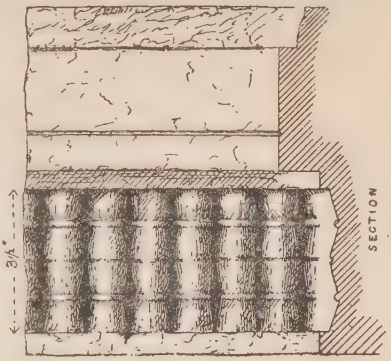


Fig. 109.—Carved stone in porch of Jarrow Church.

The Roman carver would probably not have represented these baluster shafts as used constructively unless such features had been employed in real life, though nothing exactly like them may have been found on Roman sites. In Saxon work they are not only represented in ornament but actually occur used constructively in buildings. That they are of Roman derivation may be inferred from the comparisons just made between Roman and Saxon stones, and is rendered still more probable by the technical peculiarity that the Early Saxon balusters, like the small Roman shafts with moulded caps and bases, are turned in the lathe. We come now however to the striking fact that the oldest Saxon shafts occurring at Monkwearmouth, and in the work of coaeval date at Jarrow, are in profile quite unlike anything we find in classical architecture. The existing Roman shafts of small size found in this country (save only some of a special class to be noticed presently) are classical, insomuch as they exhibit

the three parts of the normal column—base, shaft, and capital. The base and capital may be worked into any number of mouldings, and the neck may be similarly treated, but the main divisions of the whole are not really obscured. The character of these Roman shafts is well illustrated by the example shown in Fig. 4, ante, p. 10; one germane to the present subject, as it actually occurs in the belfry opening of a Saxon church tower at Wickham, Berks. The church lies close to the Roman road that strikes off from the Kennet valley at Speen (the ancient Spinae) in the direction of Cirencester, and this may explain the appearance in the building of two unmistakably Roman shafts, of which one is given in the illustration. Here we have the normal elements—base, shaft, necking, and capital—of conventional late classical form.

In the same way the decorative balusters already noticed, whether Roman or Saxon, have base, shaft, and capital. On the other hand, if we take actual Saxon balusters in real life, as illustrated in the accompanying drawings, this classical membering of the shaft is not common, and when it does occur it is in examples that may be placed comparatively late. The early shafts at Monkwearmouth and Jarrow are conspicuous for the complete absence from them of any sign of this classical norm. They are decorated with a good deal of elaboration by means of numerous shallow projections and hollows that are distributed symmetrically above and below the centre, and take no account of head and shaft and base. The most important examples, those actually *in situ* in the jambs of the porch at Monkwearmouth, are illustrated in Fig. 82 (ante, p. 145); but there exist there, or at Jarrow and Durham cathedral library, whole or in fragments, nearly fifty similar shafts of the same character, but varying in the distribution of the projections and hollows. The score or more of them in Jarrow porch are shown in the upper and undermost row in the process plate Fig. 110, while the

FIG. 110.—Baluster shafts at Jarrow and Monkwearmouth.
(From photographs kindly furnished by J. Pattison Gibson, Hexham.)

(To face p. 194.)

centre row shows some that are preserved in the vestry at Monkwearmouth. The Jarrow examples are 2 ft. 5 in. in height by about 1 ft. diameter, and they seem to belong to two types, though the examples of each type vary slightly. In one type the general outline is straight, while in the other, parts of the baluster swell out beyond the general line. This difference occurs also in the Monkwearmouth examples, which are less easy to group and rather smaller in size. In no case however, in this particular set of shafts, do we find the marked bellying out of the whole shaft towards the centre part, or the drawing in at the neck and base, of which the other illustrations which follow offer so many examples. It may be noted that though the Roman shaft at Wickham is straight-sided, there are other Roman examples of the kind with a distinct bellying. One of these is shown in Fig. 5, ante, p. 10, and another in the illustrations to Mr. Fox's paper on Uriconium, in the *Archaeological Journal* for 1897. In all the Monkwearmouth-Jarrow examples the mouldings are very delicately worked in the lathe, and give a high idea of the skill and industry of the craftsman of the time. As regards the use of them, it has been suggested that they formed part of the choir enclosures in the churches where they have been found; but, on the other hand, we have found some still in their original position at Monkwearmouth, inserted in the jambs of the window openings in the west wall of the nave. If this were the way they were used, the number found at the two churches would pretty well correspond to the number of the windows. Shafts of this particular kind seem not to have been found anywhere else in our own country, save at Hart in county Durham,[1] nor have examples come to light on the Continent. The writer has searched in vain for their prototypes in Italy and Northern Gaul, the two sources from which the builders of these churches by Wear and Tyne are supposed to have drawn their inspiration. Anything less

[1] *The Reliquary*, January, 1894, p. 2.

like them than the bold though clumsy carving of Gallo-Roman and Merovingian origin cannot well be imagined. Continental parallels to this earliest type of our Saxon shafts are apparently not to be found, though the later types of Saxon balusters to which we will now proceed can be more or less mated abroad.

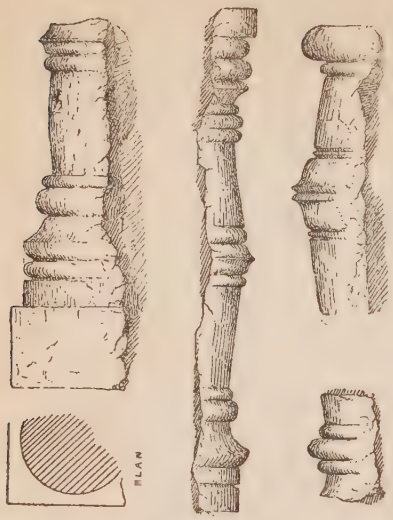


Fig. 111.—Fragments of baluster shafts in the museum at Dover.

Passing away from this specially interesting northern group, we find a set wrought on a different design but with equal care, at the opposite extremity of the country in the museum at Dover, whither they have been transferred from the Saxon church of St. Mary-in-the-Castle (Fig. 111). They are in a very fragmentary condition, and some pieces have been worked into Early English mouldings. They have been turned in a lathe, and the forms are well emphasized and the cutting sharp and clean. One example is remarkable because the shaft springs from a square plinth cut out of the same piece of stone with itself. These shafts have more of the normal baluster form, with a definite swelling in the middle part; and this shape is still more distinctly seen in the example from Barton-on-Humber (Fig. 112), where the profile is not unlike that of the little decorative baluster shafts in the north shown in

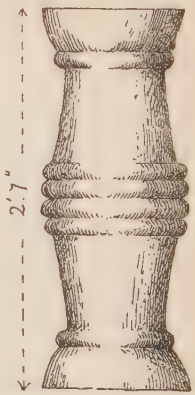


Fig. 112.—Baluster shaft from Barton-on-Humber.

Figs. 106, 108, 109. There is a well-known series of turned baluster shafts in the triforium openings of the transepts of St. Alban, figured in Buckler's work on the abbey, that are supposed to be part of the material collected for the rebuilding of the abbey church by abbot Ealdred at the end of the tenth century. This may be the truth, though it is worthy of note that they are of precisely the same stone, a fine grained oolite, as the Early Norman capitals and plinths and the plain round

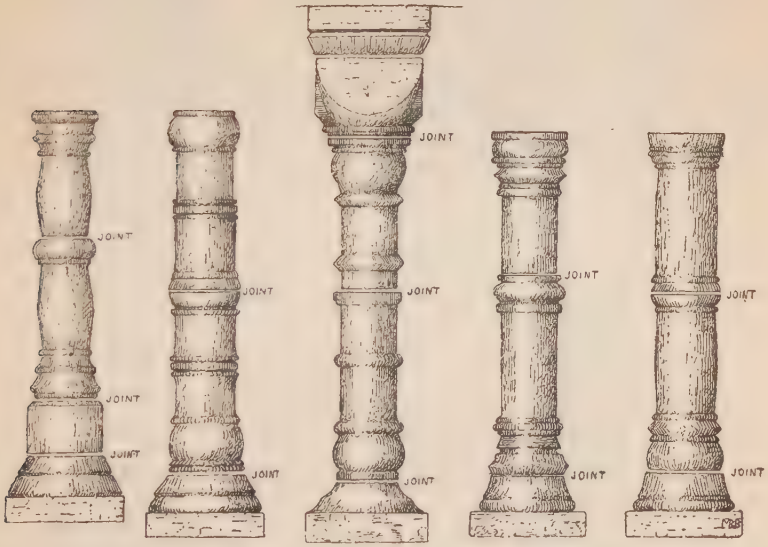


Fig. 113.—Shafts from the triforium of the Abbey Church of St. Alban.

or octagonal shafts that occur in the same range of openings. The whole of the stone may, of course, have been taken from the ruins of Verulamium, but in this case one would expect to see some trace of a Roman tool on some of the stones, showing that they had been re-used. A careful examination of the shafts has revealed no indication of the kind. It may be noted here that the shafts, which are eight in number, are in no instance all in one piece, but are made up of short lengths averaging about 30 in., which are joined as shown in the examples chosen for illustration (Fig. 113). Some of the

mouldings, especially at the bases, are made up with plaster, and the whole work presents a somewhat makeshift aspect, quite consistent with the theory that the pieces were survivals from an old store of building material. The caps on them are Norman, of a style like the one specimen shown.

It is to be remarked that baluster shafts, sometimes banded, sometimes with swelling outlines, occur in early Romanesque work on the Continent, as well as occasionally in Norman buildings in England. The continental examples are to be found rather in the western than in the eastern of the two provinces already spoken of (ante, p. 48 f.). In Germany, partly owing to the influence of Italy, the shafts are as a rule of classical plainness and classical contour, but in the Loire district banded balusters of the tenth or eleventh century are to be found, as on the façade of the early church of St. Mexme at Chinon. The west front of Tewkesbury, the west end of Lindisfarne, and the tower of Newhaven, Sussex, may be quoted as supplying Anglo-Norman parallels.

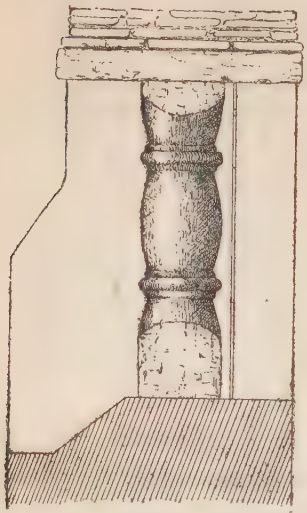


Fig. 114.—Baluster shaft in opening in western wall of Brixworth Church.

Another class of shafts is represented by the Northamptonshire examples illustrated in Figs. 114 and 115. The first is one of the two shafts dividing the triple opening from the first story of the tower to the nave at the western end of Brixworth church, and the latter is one of many shafts, all of the same character, used in the tower of Earls Barton. These examples differ from those previously noticed in that they are not turned in the lathe, but are roughly hewn to shape by mallet and chisel. They may be regarded as

clumsy imitations of the turned balusters, the use of which begins, at any rate, at a much earlier period than that to which these Northamptonshire examples can be ascribed. The Brixworth shafts possess a cap and base of the normal cubical form, cut in the same piece with the shaft.

Fig. 115.—Baluster from Earls Barton.

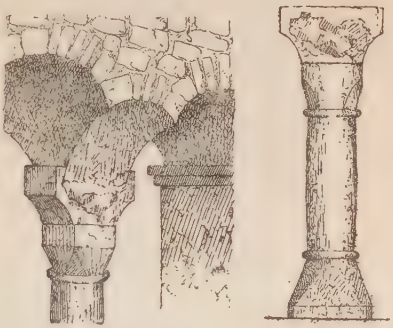


Fig. 116.—Mid-wall baluster shaft from Wing, Bucks.

With the above may be compared the similar but smaller mid-wall shaft (Fig. 116) that divides the opening high up in the east wall of the church of Wing, Bucks. This is a building which, on the evidence of its plan, has been attributed to the same age as the main structure at Brixworth. The opening at Brixworth containing the shafts (Fig. 114) is shown by distinct marks to be a later insertion in the wall where it is found. Here, at Wing, there are no such indications, and if the window with its shaft be contemporary with the rest of the fabric it becomes a document of capital importance as bearing upon its date. In this connection it must be noticed that the imposts of superimposed slabs shown in Fig. 116 are of the same make as the imposts of the nave arcades in the church below. See postea, pp. 259, 268.

The last examples selected are shafts of a simple bellying form without mouldings. Fig. 117 has a rude cap and base,

and occurs in the very interesting tower of Bardsey church, near Leeds, noticed ante, p. 156. In this tall and slender tower (it only measures 12 ft. 1 in. in width on its western face but is nearly 50 ft. high) there are on the south side two stories of double openings with mid-wall shafts and through-stones, from one of which the illustration is taken. Finally, we may refer back to page 92, and to Fig. 39, which is from the church of Worth, Sussex, where we find mid-wall shafts of rude workmanship dividing the double window openings on both sides of the nave. The church is of Late Saxon date, but the shape of the baluster, a plain bellying shaft without mouldings, is curiously like one particular form of Roman shaft referred to ante, p. 9, of which a few examples have been found. The Roman stones in question are unmoulded, and are not unlike the supports of floors in chambers with hypocaust arrangements. One at Chesters, on the North Tyne, measures 2 ft. 2 in. in height, and swells from a diameter at each end of about 5 in. to a middle thickness of nearly 9 in. In the case of Worth there can be no question of a borrowing of Roman detail, as the church is in the middle of the Andredesweald and away from Roman sites. The resemblance is merely a coincidence, and does not help us in working out the problem of the relation to classical models of these interesting features of our pre-Conquest churches.

Fig. 117.—Shaft from Bardsey near Leeds.

Next to Earls Barton the most important in an historical sense of the pre-Conquest towers in England is that of Sompting in Sussex, for this has preserved its ancient finish shown in Fig. 90, ante, p. 163. The quoins which are partly in long-and-short work are cut back evenly along a vertical line and the plaster which covers the rubble work is brought up to this.

A pilaster strip, half-round in section, runs up the middle of each face, and a little under the belfry openings a carved capital is introduced, though the strip does not end at it. The horizontal string course, a third of the way up, is cut

Fig. 118.—Impost and cap of soffit shaft from southern jamb of tower arch, Sompting, Sussex.

into a kind of billet moulding. At the summit of the tower each of the four walls ends in a gable, and the roof is formed by four planes lying on these and meeting in ridges above the apex of each gable. Those who are familiar with German churches will readily recognize the 'Helm' form, which is common along the Rhine as well as in other parts.

Internally a remarkable tower arch fixes the attention. It possesses the comparatively advanced feature of a soffit shaft and half-round roll moulding under the arch (Fig. 118). The soffit shaft has a carved cap in the ornamentation of which the originally classical motive of leaves upright and turned over at the tips is easily to be discerned. The capital is really debased corinthian and is the Anglo-Saxon counterpart of the corinthian caps already spoken of in connection with some early Romanesque churches of Germany.[1] The impost, carved with bold volutes, in the eye of which is a round mass of what looks like the seeds of a sunflower, are returned along the face of the wall. Mounting to the belfry stage we find on each of the northern and southern faces of the tower two double openings with mid-wall shafts, and on each of the eastern and western two single openings with triangular heads. This duplication of the openings is rendered necessary by the presence of the upright pilaster strip, and this is motived by the form of the roof, so that the tower must have been designed as a whole as we have it. In these double belfry openings we find examples of the corbel caps above referred to. Three of them are of the form shown in Fig. 26, No. VI, ante p. 64, but that in the north-western double opening is of the simpler shape of B in Fig. 119, where it is placed in juxtaposition with the corbel cap A in the west front at Trier on the Moselle

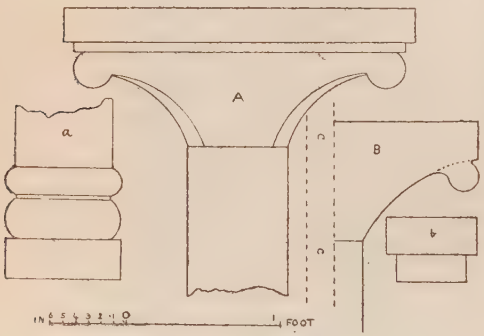


FIG. 119.—Corbel caps.

A. Corbel cap at Trier.
a. Base of shaft.
B. Corbel cap at Sompting.
b. Front view of top of cap.
c.c. Grating that fills in the window opening.

[1] ante, p. 67.

shown already in Figs. 25 and 26. The resemblance here is almost exact, though the Sompting cap is comparatively rude in execution, and it bears out the German character of the external termination of the tower.

There are two fine Saxon towers that resemble Earls Barton in the possession of long-and-short quoins and a profusion of pilaster strips, and which introduce us to some new and interesting features. These towers are Barnack in Northamptonshire and Barton-on-Humber in the northernmost part of the county of Lincoln. Barnack has unfortunately lost its belfry stage and is now crowned with a good Early English spire. It exhibits in the Saxon work that remains various openings which resemble more or less those at Earls Barton, while there are also some interesting pieces of decorative carving on the exterior, which make the tower of special importance. It is not proposed here to enter upon the subject of this carved enrichment, for this cannot be treated properly except in connection with the stone crosses the consideration of which is at present reserved; a word may however be said on the ornamental treatment of the mid-wall slabs which close the aperture of two of the smaller tower windows. These fillings have already come before us in the form of stone slabs with the apertures for light cut in them in a cruciform scheme (Earls Barton, East Lexham), or in keyhole shape (Langford in Oxfordshire). Here at Barnack the apertures are cut in a design of interlaced circles (Fig. 120). It is interesting to note that scanty remains of a wooden mid-wall slab with

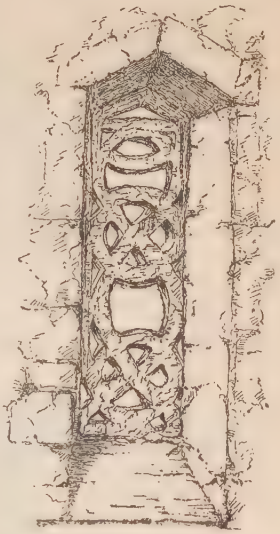


Fig. 120.—Pierced mid-wall slab at Barnack, Northants. From a drawing by J. T. Irvine.

the apertures similarly fashioned are to be seen in a Saxon window discovered in 1869 in the north wall of the chancel of Birstall church near Leicester. Other wooden mid-wall slabs with apertures not forming an ornamental pattern are to be seen in situ at Barton-on-Humber; Houghton-on-the-Hill, Norfolk; South Lopham, Suffolk; Stevington, Bedfordshire.

The slabs in these examples have been found embedded in the centre of the thickness of the walls and are evidently contemporary specimens of the woodwork used by Saxon builders.

The ground story at Barnack is well worthy of attention, but as it leads us on necessarily to speak of some new types of Saxon structures, it will be well to reserve it for consideration in another chapter.

CHAPTER VI.

THE TYPES AND FEATURES OF SAXON CHURCHES—(*Concluded*).

VIII. The Tower forming the Body of a Church.

The ground story of the tower at Barnack provides a fitting introduction to an interesting type of Saxon church in which such a ground story forms the chief space of the interior. At Barnack the ground story was evidently used for some purpose of dignity, though not necessarily an ecclesiastical one, and it opens towards the church by a tower arch of exceptional width, so that it commands the whole interior eastwards. Ingress from the exterior is gained through a lateral doorway, a rare feature as we have seen in Saxon towers. The plan, Fig. 121, and view into the interior of the tower from the east through the tower arch, Fig. 122, will give an idea of what the ground story of Barnack has to show.

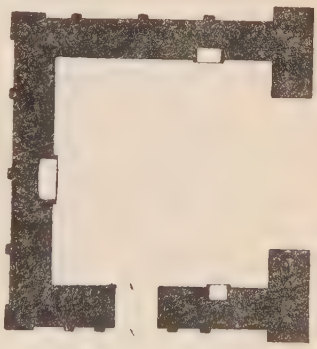


Fig. 121.—Barnack Tower.

The span of the tower arch is close upon 13 ft. and the jambs are 15 ft. high to the top of the imposts. These are very curious in their form. Whereas at Wittering (Fig. 59, ante, p. 108) and Market Overton (Fig. 46, ante, p. 99) they

are huge and simple trapezoidal blocks, we find them here, though in stone, carved into what appears the similitude of

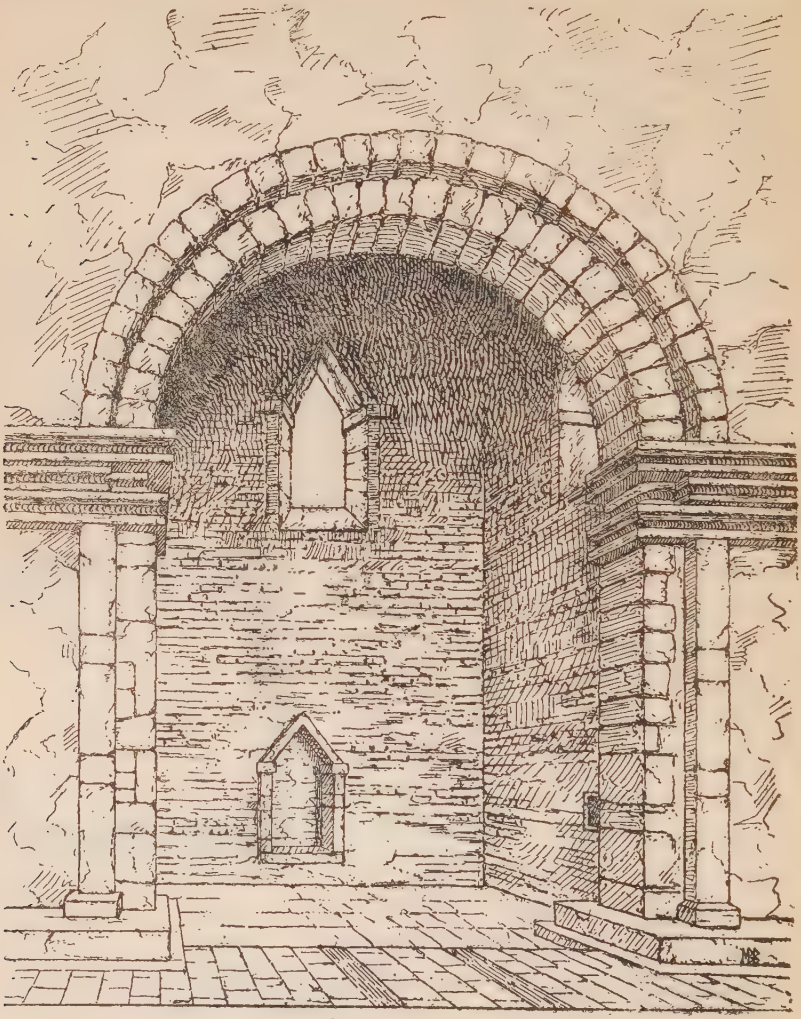


Fig. 122.—Tower arch, Barnack.

superimposed Roman tiles. Imposts actually formed in the latter fashion occur in many Saxon buildings, such as St. Pancras, Canterbury; Brixworth; and Wing, Bucks, and the Barnack carver seems to have had such models in his mind

when he set himself to hew his fine local material into shapes in which there is so little stone character.

A feature of unique interest is to be seen in the western wall of the tower. This is a recess apparently intended for a seat, with a triangular head starting from square imposts that surmount the jambs. It is about 3 ft. 6 in. in width, by a depth of 1 ft. 4 in. The seat is 1 ft. 8 in. from the present floor. When in 1854-5 the tower was cleared out and restored under the care of the late Canon Argles, some indications were found of a range of seats topped with wood that ran round the tower walls on each side of this central throne. In the north and south walls near to the tower arch and 4 ft. from the ground, there are small niches, resembling aumbries, like those in the upper chamber of the tower at Deerhurst, mentioned ante, p. 168.

It will be remembered that the Saxon church or part of it was a recognized place for legal transactions (see vol. 1, p. 371) and we have the definite statement that the south porch of the cathedral at Canterbury was used as a court of justice. It is quite in accordance with likelihood to imagine the spacious interior of the tower at Barnack employed for a similar purpose. The presiding official has his place marked out for him in the western niche while other persons charged with the conduct of business would be accommodated on the lateral benches. The wide tower arch would enable the people generally to attend the proceedings without crowding into the space reserved for the officials.[1]

[1] It has been argued that these aumbry-like niches at Barnack have an ecclesiastical significance, and that their presence is inconsistent with the theory of the use of the ground story of the tower for legal business. But the recesses in Deerhurst tower and in that of Skipwith, Fig. 93, ante, p. 168, were not necessarily connected with altars. Moreover even if the recesses at Barnack were altar-aumbries this would not preclude the use of the tower for placita. There was an altar to St. Gregory in the porch-tower at Canterbury that was actually so used. See Willis, *Canterbury Cathedral*, p. 11. For Barnack see *Journal of Arch. Ass.*, 1899.

The upper stages of the tower present the usual appearance of former habitation, and Mr. Irvine, who devoted much attention to Barnack, worked out a scheme of arrangements by which the tower could have been made fit for residential purposes. From the position of the windows he argued that the principal apartment, now the ringing chamber, was divided into two with an intermediate passage, while there were other chambers above. The doorway, which here as elsewhere opens in the east wall of the tower, is at the level of nearly 35 ft. above the ground, and gave access in his view to a space between the flat roof of the nave and the external gable, the mark of which, about 12 ft. higher up, is to be seen on the east face of the tower. In connection with this question of residence it must be noted that the level of the supposed principal apartments was more than 30 ft. above the floor of the tower, and even allowing, as Mr. Irvine assumed, an intermediate landing, the access by ladders must have been very troublesome, and the whole residence an extremely inconvenient one for persons of any distinction.

The tower of Barton-on-Humber as shown in Fig. 123 exhibits long-and-short quoins and pilaster strips which are joined by round and triangular arches in a fashion rather more logical than that illustrated at Earls Barton. On the ground story of the tower there are doorways on the south and north, a tower arch opening into the nave of the church, and another archway giving access on the west to an adjunct of Saxon date and similar workmanship, but without the pilaster strips, which was probably contemporaneous with the tower. In this western adjunct there are the marks of a wide western doorway now blocked, but this looks comparatively modern, and it is uncertain therefore whether or not a narrower Saxon door once existed in the same position.

The windows in the adjunct consist in a round-headed double-splayed light on each lateral face and two circular double-splayed openings one above the other in the western

Fig. 123.—Barton-on-Humber : the Church in its present condition.

(To face p. 208.)

wall. In both of these last there still remain portions of the original wooden mid-wall slab, pierced with a number of holes three-quarters of an inch in diameter for the transmission of light.

The tower shows on its first story on each lateral face a double window, round-headed, with mid-wall shaft that is here of a distinct baluster form as shown in Fig. 112, ante, p. 196. Higher up on each of the four faces is another such window with a triangular head. The uppermost story contains double belfry openings divided by mid-wall shafts that have no baluster-like form, with curious capitals of which No. XI in Fig. 99, ante, p. 180, gives a specimen, and through-stones exactly of the type we have become familiar with in the towers of the 'Lincolnshire' group. This stage is later in date than the rest of the tower, but like the other parts just described is of Saxon workmanship. The handsome and very spacious aisled nave and chancel are of the later mediaeval periods.

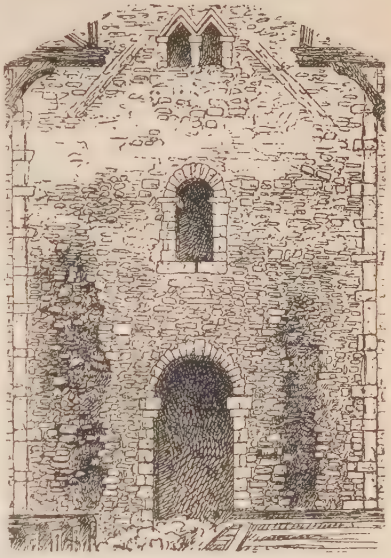


FIG. 124.—Western wall of nave, Barton-on-Humber Church, showing marks of original chancel walls of Saxon date.

The point of chief interest for our purpose is the evidence that the building affords of a type of early church of a somewhat singular kind, in which the ground story of a square tower forms the nave or body of the oratory, a small chancel being built on to the east of it. In the year 1898 some investigations kindly made by Mr. Hodgson Fowler, in the course of extensive works he was in charge of at Barton-on-

Humber church, brought to light direct evidence that in its earliest condition, or at any rate in Saxon days, the tower with its western adjunct was the church, and nothing appeared east of this save a small square-ended presbytery some fifteen feet in internal length. The proof of this is worth giving. The eastern wall of the tower, forming the western wall of the existing nave, was stripped of its plastering in 1897 and disclosed the distinct marks of side-walls projecting from it to the east (Fig. 124). That these were the walls of the original chancel was proved by excavation which laid bare

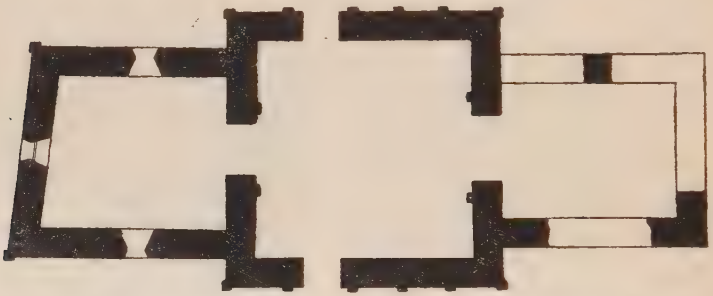


Fig. 125.—Plan of original Saxon church at Barton-on-Humber.

the south-east quoin and enough of the foundations to show its size and shape.[1] The result is the ground-plan given in Fig. 125, while Fig. 126 when compared with Fig. 123 exhibits the contrast between the aspect of the original Saxon church of which the ground story of the tower was the nave, and the later mediaeval structure in which the original small chancel has developed into a relatively enormous edifice. The uppermost story of the Saxon tower has been replaced in Fig. 126 by a saddle-back roof, for which there seems some evidence at Corbridge, and the gables are finished with stone

[1] The success of these investigations was largely due to the interest shown in the archaeological questions involved by Mr. John Briggs of Barton-on-Humber, who was carrying out the work at the church, and was at the pains to make the necessary excavations.

FIG. 126.—Barton-on-Humber, original form of the Saxon Church.

(To face p. 210.)

crosses after the fashion of one preserved in Corbridge church, and shown in Fig. 127.

This is a striking object lesson in the growth of the mediaeval church. Such growth in nearly every case resulted in a great proportionate extension of the eastern part. It is rare to find a Saxon chancel complete, that portion of the church having in most cases been amplified in later times. At Bosham, Sussex, there are distinct marks of two extensions, in the Early Norman and in the Early English styles. This is only in accordance with the tendency which in more advanced mediaeval days so modified the interiors of some of our greater churches that the eastern part became a complete church of cruciform plan, the nave passing out of importance. This is what took place at Canterbury, Lincoln, and elsewhere. Here at Barton-on-Humber it was not that the chancel was enlarged, but a whole new church, nave and aisles and chancel together, was substituted for it, the tower and western adjunct being finally relegated to the condition of lumber sheds.

Fig. 127.—Saxon gable cross from Corbridge Church.

Not far away, at Broughton near Brigg in Lincolnshire, another example of this same type of church can be detected. The church of this village, noteworthy as one of the only two which even touch the straight Roman road from Lincoln to the Humber in its course of thirty miles, has a square western tower with a later semi-circular stair turret on its western face. The present tower arch is ornate on the side towards the tower but very plain towards the church, and is clearly the original chancel arch of a church of the form now fixed at the neighbouring Barton-on-Humber. Some indications of a small chancel were found here several years ago in

connection with works for the heating apparatus.[1] It needs however only a glance at the drawings of the two faces of the tower arch (Figs. 128 and 129) to see that the western face was the one intended to be seen. The same is the case with the tower arch at Barton-on-Humber, which though not as fine as the arch at Broughton has some effort after enrichment on the western side, the eastern face being quite plain, see Figs. 124 and 130.

The Broughton arch has the curious peculiarity that the angle shaft on the north side in its lower part has been almost worn away, apparently by the process of using it as a whetstone for the sharpening of tools or implements. Such marks, generally in the form of narrow cuts or grooves, are often enough seen on the quoin stones or on the porches of our ancient churches. There are many on the porch at Goodmanham, Yorkshire. They have sometimes been explained as the marks made by sharpening arrow-heads in the good old days of the long-bow, when the butts were set up near the church, and the graveyard was used as a place of muster if not of actual exercise (see vol. I, p. 364). In most cases, however, as here at Broughton, the author of the mysterious indications is more likely to have been some gravedigger or gardener of the seventeenth or eighteenth centuries.

We have thus at Barton and Broughton two certain instances of a type of church in which the tower formed what we should call the nave or main division of the interior. It is a type for which a parallel may be found in Germany at Werden a. d. Ruhr, where, according to Effmann's demonstration, a structure of the kind was reared about the year 900.[2] It would be interesting to know whether among our Anglo-Saxon buildings there are other examples that can be included in the same category. The difference between a tower thus treated and an ordinary western tower will be seen in the

[1] See *Archaeological Journal*, LIII, 335.

[2] *Die Karol. Otton. Bauten zu Werden*, p. 168.

FIG. 128.—Tower, formerly chancel, arch, western face.

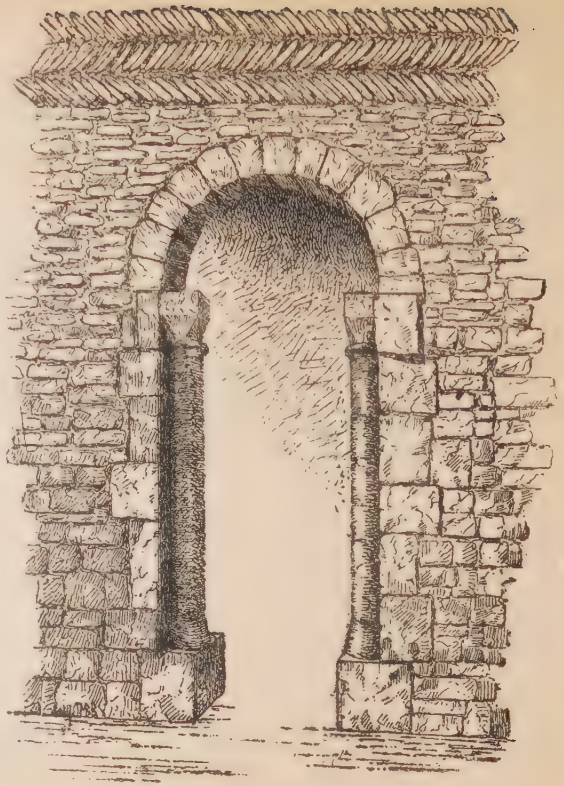


FIG. 129.—Id. eastern face.

eastern quoins. When the tower forms the body of the church the chancel which is joined to it will be narrower than the tower, and this will accordingly have its eastern quoins complete to the ground as they show equally with those at the west. The normal western tower, as in the case of all those of the 'Lincolnshire' type, is narrower than the nave to which it is joined. The eastern wall of the tower is part of the western wall of the church and this projects for one or two feet on each side showing its own quoins. Hence the appearance of nave quoins on each side of a tower removes it out of the category now under discussion, while on the other hand when the eastern tower quoins come down to the ground there is a possibility that it once had a small chancel to the east of it. Earls Barton answers to this description, whereas Barnack, the aspect of which would suggest a tower church, exhibits traces of the quoins of an old nave to north and south, and must have been all along a western tower.

The type of church which has just been discussed presents some difficulties in the matter of lighting and arrangement. Both Barton and Broughton show those doorways in the eastern face of the tower above the tower arch which have already formed the subject of discussion (ante, p. 169 f.). At Barton the north and south round-headed double windows with the mid-wall balusters are on about the same level as this doorway, and might conveniently have lighted a chamber on the first floor of the tower corresponding therewith, but in this case there would have been no opening for light in the ground story of the tower below the floor of this chamber, and the whole interior would have been dimly illumined through the lateral double-splayed lights of the western adjunct and the small chancel. The circular opening in the lower part of the west wall, with its mid-wall slab of wood pierced with holes, would have helped but little. On the other hand if we assume that there was no such floor in the tower, so that the interior would receive light through the baluster windows, what could

be the use of the doorway above the tower arch in the east wall? It is conceivable that it may have given access by means of a ladder from the ground story of the tower to a chamber contrived in the roof over the chancel, where the sacrist may have had his abode. The existence of such chambers over chancels has been already established and references have been given to parallels in Ireland and in Norman work in our own country, see ante, p. 171. The

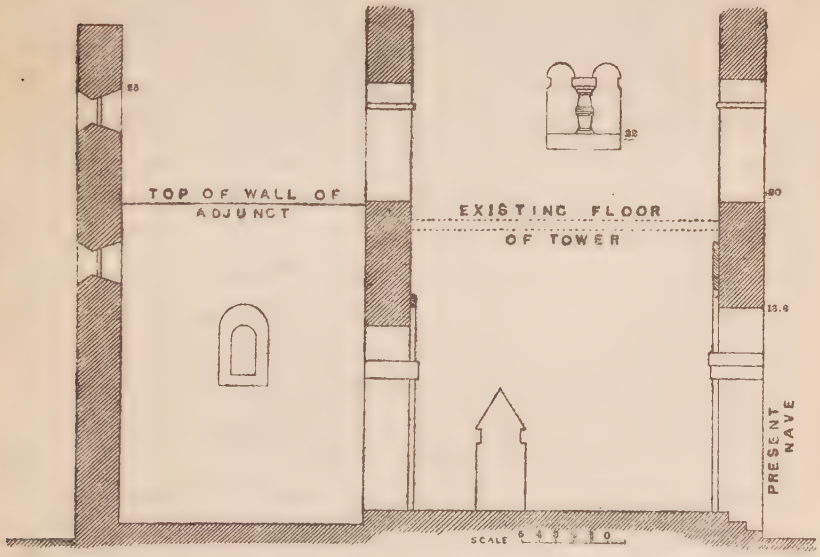


Fig. 130.—Section of tower and western adjunct, Barton-on-Humber.

western adjunct at Barton may have been similarly treated, for there is an upper opening into it from the tower, opposite to that from the tower to the chancel, and the duplication of the circular lights in the west wall would suit such an arrangement.

In Fig. 130 is given a section of the tower and western adjunct with indication of the relative levels which will illustrate the foregoing. It will be seen that the western face of the tower (formerly chancel) arch is decoratively treated with

projecting imposts, pilaster strips, and a corresponding hood mould, while a slab above this last, shown in section, is carved at the top with a human head in relief and was probably designed to carry a representation of the Crucified. The eastern face of the same arch is quite plain, see Fig. 124, ante, p. 209. It may be noticed in passing that the enrichment of the eastern face of the archway between the tower and the western adjunct, while the western face is plain, is a proof that the western adjunct is not later than the tower and is probably part of the original scheme.

At Broughton there is a small window only 12 in. wide in each lateral face of the tower about 12 ft. 6 in. from its floor, which may have lighted, though somewhat dimly, the interior. Above these there may have come a floor, for the upper doorway in the east wall towards the present church is about 17 ft. above the ground level of the tower, and a floor corresponding with it would come above the side windows. There is no indication here of a western adjunct, but the three-quarter round turret on the western face is a later addition that may not have been there when the tower formed the primitive church. Broughton tower has a doorway in the southern wall quite at its western end, but no doorway on the north. The two lateral doorways at Barton-on-Humber are also towards the western limit of their walls, and appear like the single one at Broughton to be placed with a view to use by a congregation.

IX. Axial Towers.

Barton-on-Humber as we see it now is a large mediaeval church with a western tower that forms no part of the interior, and the discovery that this now abandoned space was in reality the original church is so surprising, that the arrangement seems at first sight more peculiar than it really is. It is at any rate an easy transition from towers used in old time as

those of Barton and Broughton were used to the kind of tower here called axial. The axial tower is one in which the ground story forms one division of the church as it is traversed from west to east, and may be (1) situated at the western end, (2) between nave and chancel, or (3) at the eastern end where its ground story forms the chancel itself. It differs from the ordinary western tower, and from the tower that forms the body of the church, in that it is practically the same width as the body of the edifice, whereas the others are either narrower or wider, and it must be distinguished also from the central tower of a cruciform plan where the tower is flanked by transepts or transeptal chapels.

(1) The fine church of Hooton Pagnell, near Doncaster, possesses now a western tower, a nave with north aisle, and an extensive chancel. The western third of the last, the nave, and the ground story of the tower, are built in rubble work that might well be of Saxon date, and this work extends on the tower to a height a little greater than that of the nave walls. The recessed tower arch and the chancel arch are original, and the latter has early detail. The construction of the arches however hardly looks to be Saxon and an Early Norman date for the church seems most probable. The point of interest for the present purpose is that the tower is externally the same width as the nave but the wall of it is thicker, so that the internal measurement of the tower is less than that of the body of the church. This thickening of the walls, with the existing tower arch and the evidence of the exterior masonry, make it probable that a tower was contemplated in the original plan of the church, and this leads to the inquiry whether other early churches, which have a western division with thickened walls, were intended originally to be finished with a western axial tower like that at Hooton Pagnell.[1]

[1] The Hampshire example of Boarhunt, Fig. 55, ante, p. 105, exhibits the marks of a western division without any thickening of the wall as compared with that of the nave.

Diddlebury, Shropshire, may be adduced as actually exhibiting a tower of the kind, but Diddlebury, an interesting monument, needs some analysis. The earliest part is the north wall of the nave, with a small portion of the return wall forming the western limit of the nave and dividing it from the western tower, which is the same width as the nave. That this earliest part of the fabric is Saxon is proved by the very characteristic north doorway and double-splayed window shown in Figs. 44 and 40, ante, pp. 95, 93. The wall in which these features appear is treated quite exceptionally. On the exterior it exhibits squared ashlar work of a quality almost equal to that at Bradford-on-Avon; the courses being of irregular heights but carried in each case consistently along the wall, and showing careful fitting of the stones. This is original work, for the jambs of the double-splayed window are included in it. In the interior on the other hand, there is a facing of herring-bone work in which the stones are carefully cut to shape and fitted, with mortar joints $\frac{1}{4}$ to $\frac{1}{2}$ in. in thickness. See Fig. 131.

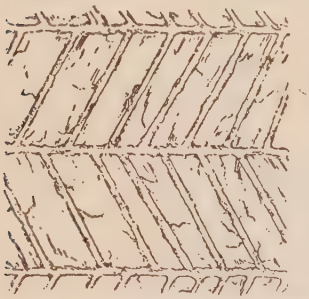


Fig. 131.—Herring-bone facing from the interior of Diddlebury Church, Shropshire.

Along the foot of the north wall on the exterior runs a plinth of three square orders, and this continues without a break from the original eastern quoin of the Saxon nave to the present north-western quoin of the western tower. If the tower wall above this Saxon plinth were also Saxon, we should have an undoubted Saxon western axial tower, but unfortunately the tower wall in its oldest part, the eastern half of the northern face, is not sufficiently like the north wall of the nave for us to accept it as pre-Conquest. The original thickness of the tower wall either on the east or on the north cannot now be ascertained. Most of the tower is of Norman and later dates,

and it is encumbered with unwieldy later buttresses, one of which hides the junction of nave and tower.

With Diddlebury may be mentioned Daglingworth, Gloucestershire, where the Saxon nave had a square western division of which the wall was thicker by more than a foot than that of the nave. The wall between this and the nave has been removed, but it is known that it opened towards the nave by a wide arch.

In connection with these western divisions, this will be a fitting place to introduce a notice of two buildings of remarkable interest in East Anglia, one of which has been known and discussed for some time past, while the other has had its ecclesiastical character and early date fixed by investigations recently carried out.[1]

Each of the structures in question is located at a place called Elmham. There is a North and a South Elmham in East Anglia, the former in the heart of Norfolk a few miles north of East Dereham, the latter in the north eastern corner of Suffolk not far from Bungay. Now when Theodore of Canterbury, about the year 673, had divided the East Anglian diocese the original seat of which was Dunwich on the Suffolk coast, we find the second bishop located at 'Elmham.' This was obviously the Norfolk Elmham, for South Elmham in Suffolk is only a dozen miles from Dunwich, and it is simply not arguable that the second seat of the divided diocese can have been located so close to the parent see. The succession of the East Anglian bishops was interrupted for a hundred years in the Danish period, but in 956 the see was re-established at 'Elmham' as the one East Anglian bishopric.[2] At that epoch a bishop's church must have been built or restored, and this church may have been renewed at any time before the East Anglian see was removed in 1075 to Thetford, to be finally located in 1094 at Norwich.

[1] See *The Builder*, vol. LXXXIV, 1903.

[2] See Stubbs, *Registrum Sacrum Anglicanum*, Oxford, 1897, p. 230 f.

Which of the two Elmhams was the seat of the restored bishopric of 956 is another question. North Elmham was after the Conquest in the possession of the see of Norfolk and the bishop had a residence there, but South Elmham and its neighbourhood were also associated with the see, and we have the following curious notice in Domesday about Hoxne in Suffolk, some nine miles from South Elmham, 'in h manⁿ. ē æcclia sedes episcopatus de Sudfolc. T.R.E.'[1] At both the Elmhams there exist ruined buildings which on their face-values would be ascribed to the eleventh or twelfth century, but which may be in fact earlier than their general aspect seems to suggest. The building at South Elmham in Suffolk is called the 'Old Minster' and there is a description of it by Mr. C. E. Peers in the *Archaeological Journal*, vol. LVIII, p. 423 f. Fig. 132 gives the plan.

The structure which is of flint rubble exhibits little, save its size and some peculiarities of plan, to mark it off from other Norman apsidal chapels in the same region, such as that of Mells near Blythborough, or the chapel outside the keep at Castle Rising. In material, technique, and form of window openings it accords with a Norman origin. The chief peculiarity, over and above an abnormally wide chancel arch, is the existence of a division in the nave cutting off a western portion the walls of which are thicker by about 8 in. than the walls further east, though flush with these on the exterior. The difference is rather more than that observed at Hooton Pagnell, where the western division as we have seen now carries a tower. Whether a tower existed at South Elmham cannot be absolutely determined. Apart from the thickening of the wall there are no appearances of this, but it is a possibility of which account should be taken. The fact that the partition wall across the nave is no mere screen but a wall as thick as the external ones to the west of it, is in favour of a tower. It is against it on the other hand that

[1] II, 379.

there is no single tower arch but two openings into the nave; while the similarity of the fenestration in the western division and in the nave also militates against the supposition of a tower. What other reason however can there be for the thickening of the wall?

At North Elmham there exists also a ruined church, of which Fig. 133 gives the plan. This it will be seen at once presents features of novelty and interest. There is a long narrow aisleless nave ending in a transept, in the east wall of which is the arch of the presbytery opening into an apse. The plan is thus an example of the 'crux commissa' about which a word will be said on a coming page. West of the transept, and opening into the nave through doorways, are two chapels.[1] A curious technical peculiarity is to be observed in the filling of the re-entrant angles on the plan with buttress-like pieces of the shape of quarter cylinders. These are to all appearance of contemporary date with the walling. For the purpose on hand we are chiefly concerned with the western end. Here is a part divided off from the rest of the nave, with which it communicates through one opening 10 ft. wide instead of by two openings as at South Elmham. The walls of this sundered portion are about 5 ft. thick, whereas the walls generally measure 3 ft. 3 in. This fact in itself suggests a tower, and the presumption is raised almost to certainty by the existence at its south-eastern corner of a projecting turret half-round in plan containing the remains of a spiral stair. Such a stair turret on the western face of a tower occurs, we have seen, in four examples of Saxon date (ante, p. 175). Here at North Elmham the position suggests that of the flanking stair turrets so common in German work, but the feature is single and not double.

All that has been attempted here is to present these two

[1] The northern chapel has been much pulled about, and in its external outline it may originally have corresponded with that upon the south. The whole building is encumbered by additions and alterations of later date.

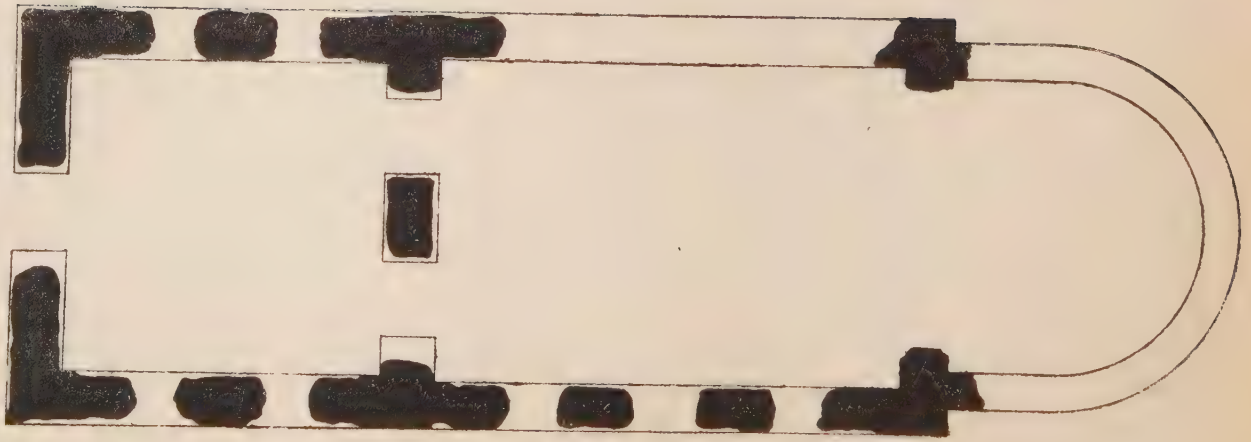


Fig. 132.—Plan of Old Minster, South Elmham, Suffolk.

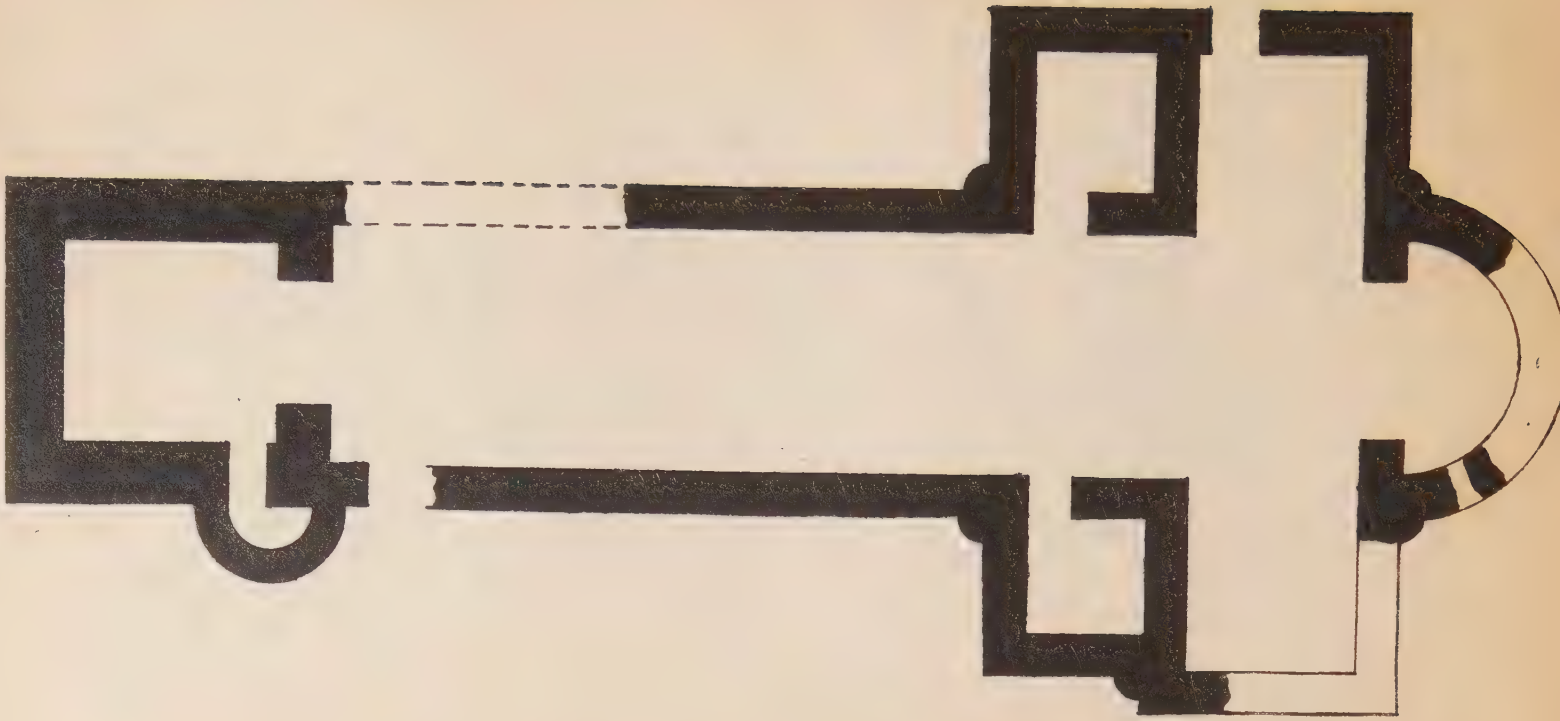


Fig. 133.—Plan at North Elmham, Norfolk.

Elmham ruins as examples of the particular type of plan here under notice. No discussion of their date can be satisfactory without a proper historical treatment of the whole subject of the two Elmhams and their relations to the East Anglian sees, and this it is hoped may before long be accomplished by a competent authority on East Anglian lore. If a pre-Norman date be indicated for the N. Elmham ruin, it is not because any specifically Saxon characteristics are to be discerned in it, but because the earthworks of an Early Norman burh, or moated mound, almost overlie its western end and in all likelihood are posterior to it in date.

There is accordingly some reason to regard the axial western tower as a Saxon form perpetuated in England in Norman times. The western adjuncts (Barton-on-Humber) and the western divisions in naves (Boarhunt, Daglingworth, Diddlebury) must be taken into account as indicating stages in the evolution of the scheme. It is worth notice that in German Romanesque there are some examples of the scheme, and one or two are indicated below.[1]

(2) The Axial tower between nave and chancel we find at Dunham Magna in Norfolk, a Late Saxon building of much interest. The triangular-headed western door, now blocked, is seen in the view Fig. 134, and the shallow arcading which runs round the wall of the nave in the interior has been noticed in connection with the similar feature on the exterior of Bradford-on-Avon (Fig. 77, ante, p. 137). The tower with its belfry-openings is of the plain 'Lincolnshire' type but possesses long-and-short quoins. The plan of the church is given in Fig. 135, but the chancel, which is said to have ended apsidally,[2] is of later work. It is to be noticed that the north and south walls of the tower are on the exterior flush with the walls of the nave but they are thicker, so that the interior space

[1] Clemen, *Die Kunstdenkmäler der Rheinprovinz*, I, 4, Bedburg by Cleve; III, 2, Gruiten by Elberfeld; IV, 4, Dürscheven by Euskirchen.

[2] Archaeological Institute, 'Norwich' volume, 1851, p. 216.

FIG. 134.—Dunham Magna, Norfolk, from the north-west.

(To face p. 224.)

under the tower is less in width than the nave by about two feet. The eastern quoins of the tower come clear to the ground but the western ones stop when they reach the summit of the walls of the nave.

Besides Dunham Magna there is no other church with axial tower between nave and chancel that is so completely Saxon, but hard by at Newton, close to Castle Acre, there is another axial tower of Saxon date that stands between a later nave and chancel, and at Langford in Oxfordshire a very fine church of post-Conquest date enshrines a Saxon axial tower that has features

Fig. 135.—Plan of Dunham Magna, Norfolk.

worthy of remark. Its double-splayed windows, in which the aperture is cut in a keyhole shape in a mid-wall slab, have been already mentioned (ante, p. 166). It has external pilaster strips that start and end with a step-like finish that reminds us of the similar features at Bradford-on-Avon, and are of the abnormal width for Saxon work of a little over a foot. Waith near Grimsby, Lincolnshire, and Northleigh, Oxfordshire, have Saxon axial towers in later setting, and the same is probably true of Guildford, Surrey. Here a massive tower with double-splayed lights and pilaster strips is embosomed in later structures, but as the strips come down to the ground on the north and south sides where they are visible now inside the church, it is clear that these sides of the tower were once external.

(3) The ground story of a tower used as a chancel, a rarer plan than the one just noted, occurs in Saxon work at

Weybourn in the north of Norfolk, and it is said that the tower of Godalming church, Surrey, before the modern alterations, bore clear evidence that it was once the chancel of the earlier church.

The Saxon tower of St. Peter, Bedford, occupies a rather curious position. It is now axial, but the chancel which it precedes is of greater width by about a foot than the tower. The chancel may conceivably have been the original nave and the tower a western one, while there are signs at the western face of the tower that there was once some building joined to it in this part. The eastern face of the tower possessed a triangular-headed opening on the first story corresponding to the openings already studied in the eastern walls of western towers above tower arches, and this fact lends force to the suggestion just made. The opening is visible now in the interior of the tower.

X. Central Towers, Transepts, and the Cruciform Plan.

We possess one complete Saxon cruciform church with central tower, two others of which the plan is clear though parts of the church are no longer Saxon, and one or two more that are not completely developed or about the form of which there is some obscurity. St. Mary, Dover Castle, is Saxon throughout (see Fig. 171, postea, p. 307); Stow, Lincolnshire, has Saxon transepts, Norman nave and chancel, and later central tower replacing a Saxon one; while Norton, Durham, gives us a Saxon tower and north transept with part of a south transept, and a nave and chancel that are mainly of Transitional and Early English date. The other buildings are Breamore, Hants; Deerhurst, Gloucestershire; Wootton Wawen, Warwickshire; Stanton Lacy, Shropshire; Repton, Derbyshire; Britford, Wilts; Worth, Sussex, and the Saxon abbey church

at Peterborough, the foundations of which exist under the present structure. Some of these, such as Worth, are completely cruciform but have transepts lower than the nave and no central tower. Others like Breamore have the tower but only undeveloped transepts, and there is about all the others some uncertainty as to whether their original scheme included a central tower, or whether they were ever completely cruciform.

We approach here a subject that involves no little complication and difficulty, and will treat (1) the growth of the side chapel or porch into the transept, (2) the central tower in its relation to the cruciform scheme, and (3) the so-called 'crux commissa' or T shaped plan.

(1) The side chapel not a porch is found in its simplest form on the south side of the supposed original fabric of St. Martin by Canterbury and is indicated in Fig. 70, ante, p. 120. It also occurs at St. Pancras, Canterbury. The side porch that is at the same time a side chapel was a feature of the Saxon cathedral at Canterbury (postea, p. 260 f.) and we may probably take it to exist at Bradford-on-Avon and at Bishopstone, antè, p. 131 f.

In the last mentioned case the projecting features occur at the western end of the nave and at Bradford they are west of the centre, while in the Canterbury examples they are almost exactly in the middle of the length of the churches. It remains to find such projecting features at the eastern ends.

Now at Britford near Salisbury, there exists a substantially Saxon nave to which a later central tower, transepts, and chancel have been added. This nave, Fig. 136, measures 44 ft. 4 in. in length by a width of 20 ft. 2 in., and at the extreme eastern end of it there were found some years ago two very remarkable arched openings in the north and south walls. They had been built up and plastered over, and being now carefully cleared and protected by small outbuildings on the exterior, they appear in very good preservation. The northern archway is 5 ft. 9 in. wide by a height of 7 ft. 10 in., that on the south 5 ft. 7 in. wide and 7 ft. 8½ in. high. The present south doorway into

the nave further west than these openings is in a third Saxon archway 8 ft. 9 in. high by 5 ft. 9 in. wide, but it is probable that this third opening has no special connection with the two others. These last correspond pretty closely in position and in size, but are curiously different in technical treatment. The arch of the southern opening (Fig. 137) is turned in large Roman bricks evidently re-used. Some of them are voussoir shape,

Fig. 136.—Plan of Saxon portion of Britford Church by Salisbury. (The parts to the east of the openings are later.)

about 13 in. long by a thickness of 3 in. at one end tapering to 2 in. They are not however all set voussoir fashion so that this wedge shape shall fit the form of the arch, but as often as not they are reversed so that the thin edge instead of the thick is on the extrados of the arch. The necessary wedge-like forms without which the arch could not be constructed are given by the mortar joints, which are thicker on the extrados than below.

The jambs are lined by tall and narrow upright stones, about 4 ft. 6 in. high by 9 in. wide, standing on plinths and set at the outer thirds of the jamb with a recess in the interval between them, the whole thickness of the wall being 2 ft. 5 in.

They are crowned by imposts which show the remarkable peculiarity already observed in Roman work and at Escomb (see ante, pp. 5, 114) that they are cut away to receive the head of the jamb stones which are mortised into them (Fig. 137). On the exterior face of the wall, now made conveniently accessible from the inside, there was a square-sectioned strip of stone 2½ in. in face by a projection of 1¾ in. that ascended the jamb and then followed the curve of the arch after the

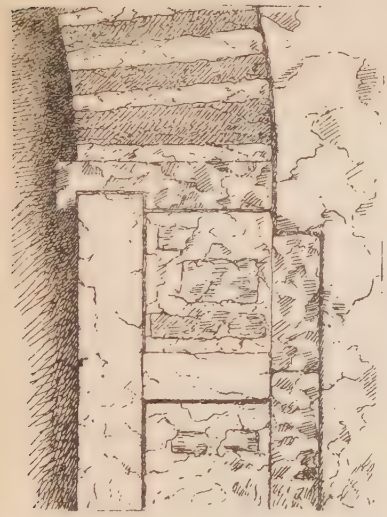


Fig. 137.—Face of jamb with springing of southern arch, Britford, Wilts.

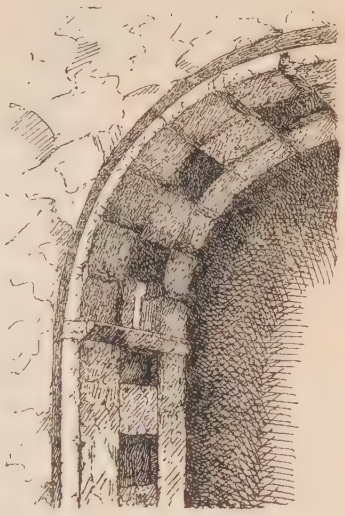


Fig. 138.—Soffit of northern arch, Britford, Wilts.

manner of a hood mould. The imposts were probably returned along the outer face of the wall to meet this strip. The same feature occurs on the exterior face of the northern opening, and there are pretty clear indications on the inner side of the south opening that a similar strip had appeared on this face also. At the right-hand of the drawing in Fig. 137 is shown the vertical pilaster strip that, like the impost, has been hacked away flush with the wall and then covered with plaster, from which it has now been freed. The traces of this strip-work are of great chronological significance.

The soffit of the northern opening (Fig. 138) is treated quite differently. It is panelled, so to say, with flat square slabs that are cut on their faces to the curve of the arch, and that leave between them recesses, like cassettes. The work is very careful, for the curved soffit slabs are framed as it were by bricks set edgeways, and bricks form the floor of the recesses or cassettes.

The jambs have the plinth, imposts, and upright stones like the other archway, but these are not let into the imposts. In the space between the uprights there are square slabs with recesses above and below them. The most remarkable feature of the whole work is the ornamentation on the upright jamb stones and intermediate squares on the eastern jamb of this northern opening. This carving is in its character unique in Saxon architectural work, though it may be paralleled on the sculptured stones, in connection with which the writer hopes to deal with it on a future occasion.

There are other details which might be noticed and which constitute differences between the two openings, but enough has now been said about their technical treatment. The purpose for which they were intended is a matter for conjecture.

There are practically three alternatives. They may have been (1) doorways to the exterior, (2) arcade openings, the survivors of a series giving access to side aisles, (3) archways admitting to side chapels. (1) is excluded, not because there is no rebate for doors, for Saxon doorways in most cases (ante, p. 103) appear not to have had rebates, but because the ornamentation on the jambs is quite out of character with mere doorways. (2) The southern opening would work into the scheme of an arcade with the more westerly opening on the same side where is now the doorway of entrance, but the piers between the openings of such an arcade would have to be about 6 ft. wide. The arches however are too small in scale, especially too low, in proportion to the width of the

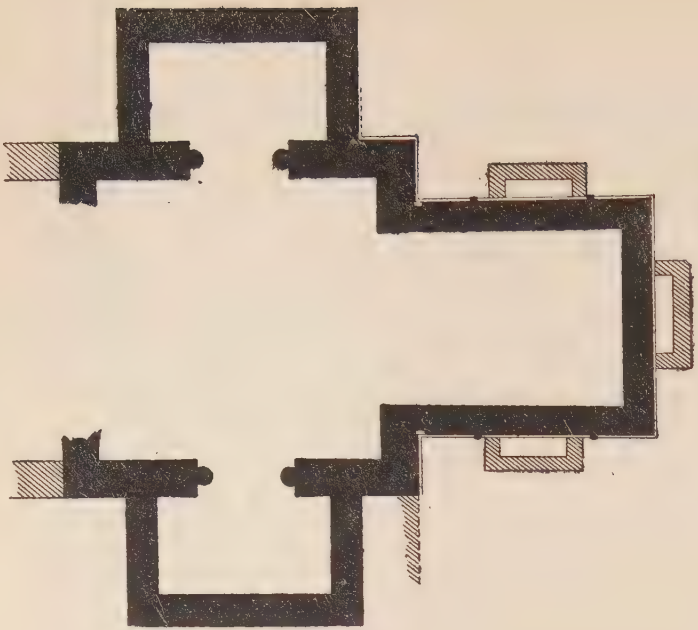


Fig. 139.—Eastern part of Repton Church, Derbyshire, showing probable Saxon plan.

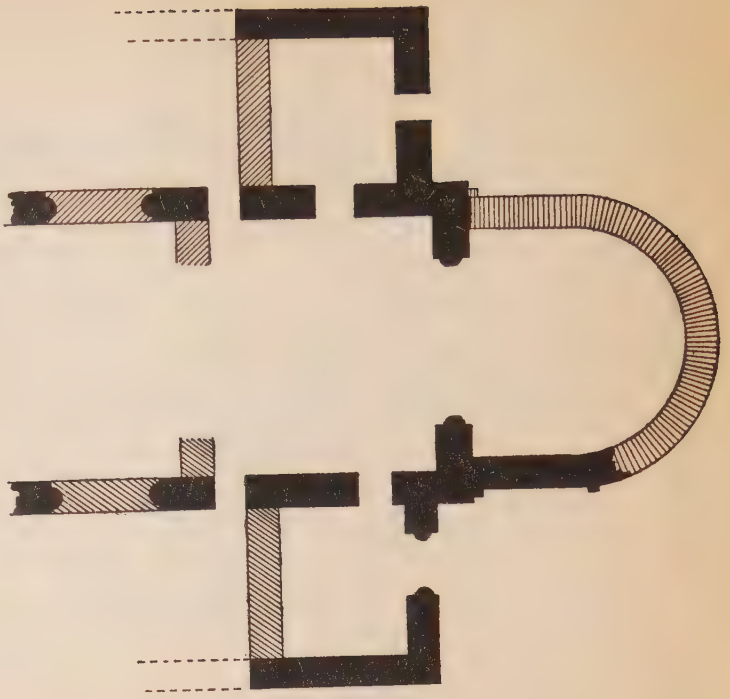


Fig. 140.—Plan of eastern part of Deerhurst, Gloucestershire. The shaded parts show Saxon walling now destroyed.

nave for us to suppose them arcade openings. (3) There remains the supposition that they gave access at one time to side chapels, in which connection their ornate appearance would be quite in character, and their dimensions would be proportioned rather to the presumably small size of the chapels than to that of the nave out of which they led. Assuming this to have been their destination the eastward position of the side chapels is significant.

The same arrangement meets us at Repton, Derbyshire, where is a Late Saxon chancel and beneath it a crypt that will occupy our attention later on. Besides the crypt and chancel the church has preserved relics of the eastern part of the Saxon nave with side chapels that measured internally about 15 ft. west to east by about 8 ft. north and south. There is a doubt as to the character of the access to them from the nave, but two Late Saxon columns are now preserved in the southern porch of the church which seem the relics of a set that were used as soffit shafts to archways that opened from the nave to these side spaces. One of these shafts is represented in Fig. 156, postea, p. 259. At Deerhurst, Gloucestershire, at the eastern end of the nave, there were side chapels or as they have been termed choir aisles, about 12 ft. square internally, to which access was gained from the nave, on the ground floor at any rate, only through doorways. (See Figs. 139, 140.)

The growth of such side chapels into transepts may be illustrated by the example at Breamore, Hants. This spacious and handsome church, Saxon throughout save for the south porch which is of later date, has only been recognized as such within the last few years. The plan is given in Fig. 141 and it must be noted that in the north wall there is the mark of the gable of a transept or side chapel that corresponded to the existing projection on the south. Fig. 142 shows the exterior aspect of the eastern part of the nave when seen from the south. The part that projects southwards is from the exterior quite worthy to be termed a transept, yet the archway leading

Fig. 141.—Plan of Breamore Church, Hants.

to it from the nave is only 4 ft. 5 in. wide with a height of about 10 ft.

This archway, Fig. 143, is of sufficient interest to repay a short digression. The wall in which it is pierced is 3 ft. thick, the voussoirs but not the jambs are formed of through-stones. Its Saxon origin may be argued from the inscription in Old English

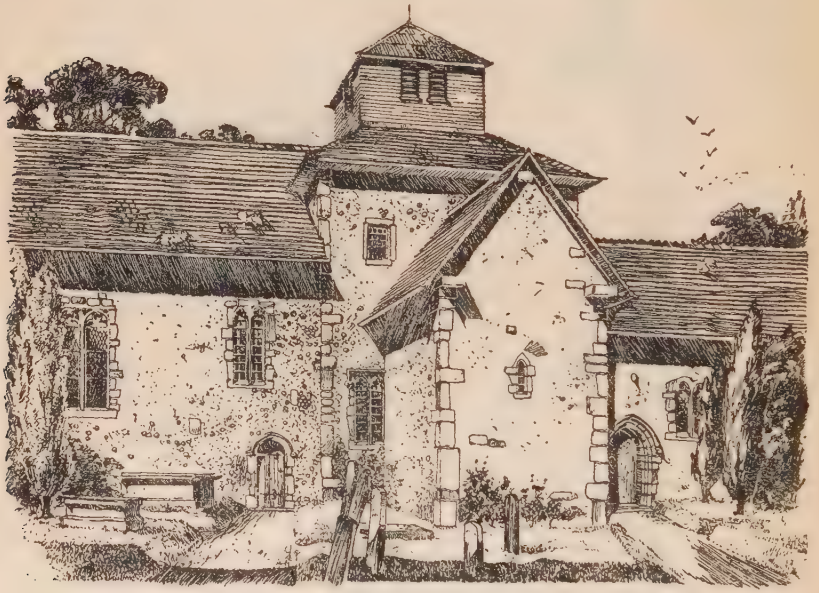


Fig. 142.—Breamore Church, Hants, from the south.

which appears round the arch, and should be divided and translated as follows HER SƿUTELAÐ SEO GECƿY-DRÆDNES ÐE, Here is-made-manifest the covenant to-thee.[1] The meaning of the words is not clear. It has been suggested that they refer to the accomplishment of some vow, or again that they indicate the entrance to the baptistry, for which purpose the side space may have been used, though baptistries are generally at the western ends of churches.

Passing on to other examples of the completely cruciform or undeveloped cruciform plans, we note that there is a fully

[1] The above is owed to the kindness of Mr. G. Gregory Smith.

developed north transept at Stanton Lacy, Shropshire, but it has no corresponding transept to the south, and the access from the nave has been modernized.

At Stow and Norton there are or were fully developed transepts, as large in section as the nave. At Dover and Worth the transepts are smaller though the churches may be considered completely cruciform. In respect of openings, at Stow the wide Saxon tower arches remain (see Fig. 146), but

Fig. 143.—Archway into southern transept or chapel, Breamore, Hants.

at Norton they have been enlarged 'by the removal of the inner order of voussoirs and those portions of the jambs which supported them,'[1] a fact which implies a want of amplitude in the Saxon arches. At Dover again, the present transeptal arches of the twelfth century seem to represent an enlargement of the Saxon openings, while at Worth these openings are original. This leaves Worth the only Saxon cruciform church that is in plan complete and untouched, and the example is of sufficient importance to warrant a moment's pause.

[1] *The Reliquary*, Jan. 1894, p. 9.

The general view, Fig. 145, taken from the south-east, and the plan, Fig. 144, will give an idea of the character of the edifice, the surroundings of which have inherited their wild sylvan beauty from the old forest of Andred that once covered this part of the country. The church is aisleless, cruciform and apsidal, but has no central tower, the tower seen in the view being a modern addition. The quoins are in long-and-short work and there is an abundant display of pilaster strips. A feature very pronounced in this building, that is not common elsewhere save in towers,[1] is the horizontal string course which runs round the apsidal chancel as well as along the walls of the nave, though on the walls of the transepts, which are lower, it does not occur. The pilaster strips are bounded above by this string course where it appears, and above it come the windows. In the nave these are of the double form, with the mid-wall shaft, illustrated in Fig. 39, ante, p. 92. There are original doorways of characteristic Saxon type of nearly 14 ft. in extreme height by a width of 3 ft. 8 in., facing each other north and south towards the western end of the nave. The northern door is now blocked.

The chancel arch at Worth is the finest of all that are extant. Its width is 14 ft. 1 in., its height 22 ft., and the rock-like massiveness of its huge ungainly imposts, and the large stones of the arch that take the whole thickness of the wall, are thoroughly Saxon. The arches into the transepts, in width 8 ft. 7 in. (south) and 8 ft. 8 in. (north) by about 15 ft. in height, are plainer but equally imposing in their solidity. As the internal width of the transepts is 14 ft. 9 in. and 14 ft. 10 in. respectively the arches are of full proportionate size.

We have now had before us a series of side chapels and transepts extending from the tiny lateral projection at St. Martin, Canterbury, entered merely through a doorway, to the imposing transepts of Stow and the transeptal arches of Worth.

[1] It occurs at Bradford-on-Avon, Repton, and Wroxeter, and has left traces at Barholm, Lincolnshire.

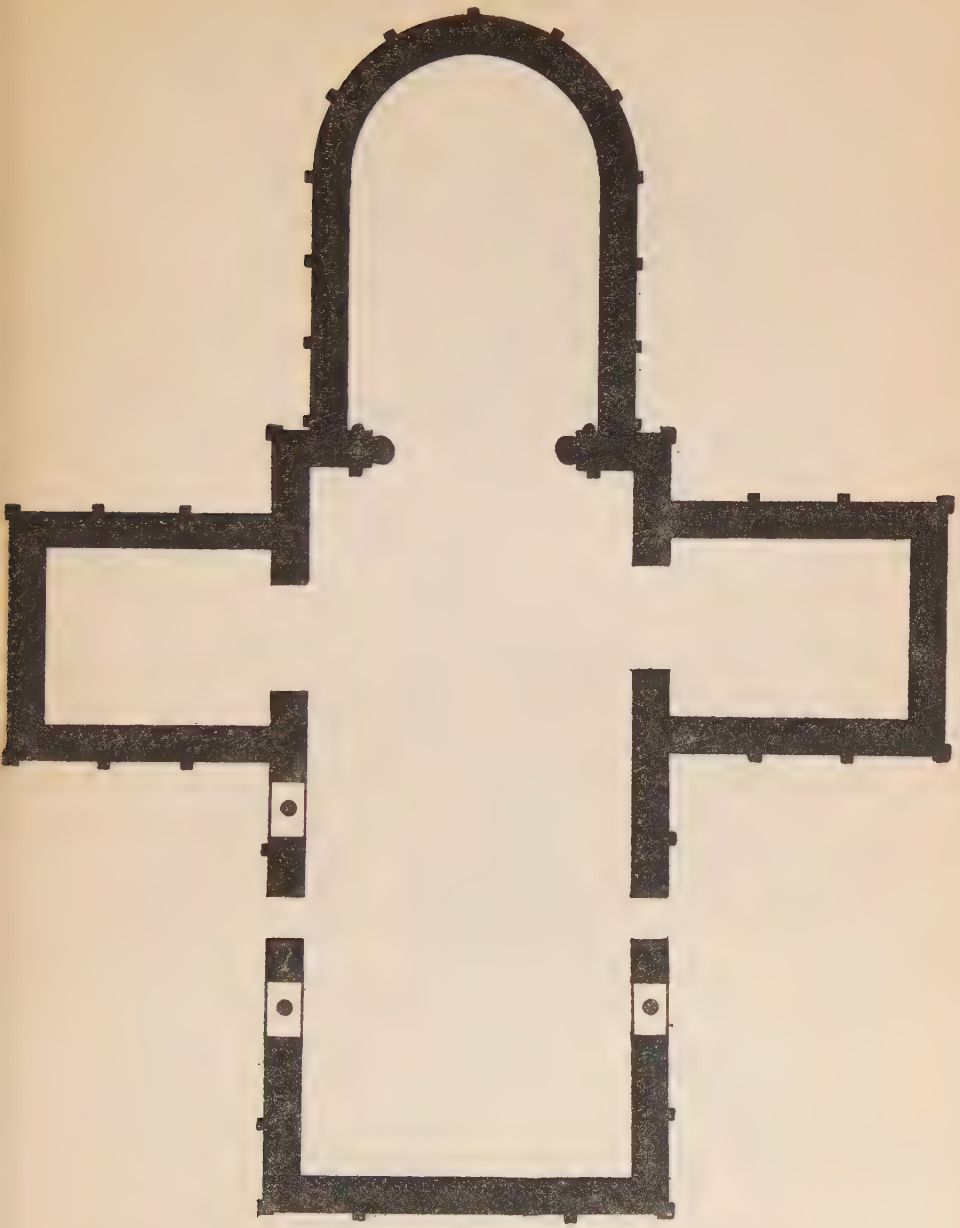


FIG. 144.—Plan of Worth, Sussex.

Breamore, and Deerhurst, where are transepts, but only doorways into them, furnish significant intermediate links.

(2) Nothing has yet been said about the central tower in its relation to the development of the plan. In idea the central tower, or some similar feature to emphasize the crossing, is an essential element of the developed cruciform plan, and it forms a conspicuous feature of our own later cruciform churches, as well as of those of Germany. As a fact however, in the evolution of the cruciform plan in Saxon architecture the central tower plays no decided part, and its non-appearance in the most perfect example of this plan at Worth is significant. Of churches which possess fully developed or embryo transepts, Dover, Norton, Stow, and Breamore still exhibit such towers, while their existence in Saxon times at Stanton Lacy, Repton, Deerhurst, and other examples, is problematical. If the Saxon central tower always involved for its support a thickening of the walls, its previous existence would in this way be detected. In the case of the axial towers of Dunham Magna (between nave and chancel) and Hooton Pagnell (at western end) there is this thickening, but it is not to be observed in the Saxon examples of Dover and Breamore, where the tower walls are no thicker than those of the nave. Hence this test of the previous existence of central towers in churches which now lack this feature, cannot yield sure results. The thickening may be held to prove the tower or the intention of one, but the absence of any such preparation in the walls for an additional superstructure does not preclude the actual existence of the central feature. In the case of Barton-on-Humber, where the tower was an original feature, the tower walls are the same thickness (2 ft. 6 in.) as those of the western adjunct and chancel. It was clearly not always considered necessary to thicken walls that had to be carried to the height of a tower.

The central tower may accordingly be regarded independently of the cruciform plan, and when we take it in itself we

FIG. 145.—Worth Church, Sussex, from the south-east.

(To face p. 238.)

see at once two distinct types of the feature. Going back for a moment to the axial tower as represented at Dunham Magna, we note that this is on the exterior flush with the walls of the nave out of which it rises without any break or feature. Only on the inside does it betray its existence in the plan by a thickening of the wall. On the east where the chancel is narrower than the tower the quoins of the latter descend independently to the ground. The same is the case at Dover, though here there is no thickening. At Breamore the tower not only asserts itself like the two last at its eastern quoins, but exhibits also what Dunham lacks, a continuation of the *western* tower quoins down to the ground in the form of courses of long-and-short work embedded in the wall and flush with the general surface of it (see Fig. 142, ante p. 234). A tower that is merely a growth out of the nave wall, like the three just mentioned, is independent of transepts, which may or may not exist without the tower being affected. Dunham Magna and Dover are almost alike so far as the tower is concerned, but only the latter has transepts. (See plans on pp. 225, 307.)

On the other hand at Norton and Stow the central tower is quite distinct from the nave, and all four quoins of it descend clear to the ground in independence of any other structure.[1]

Fig. 146 indicates the plan of the Saxon central tower at Stow, with the nave, chancel, and transepts that are all narrower than the tower and abut against its walls leaving the corners free. This independence of the tower is emphasized also in the remarkable structure at Wootten Wawen, near Stratford-on-Avon, Warwickshire. A square Saxon tower stands here in the axial position between a nave, the north wall of which is old and may be contemporary with the tower but which has a later south aisle, and a later chancel with extensive south aisle. The tower is a good deal narrower than the nave, and narrower too than the present

[1] This was noticed by Mr. C. C. Hodges in connection with Norton. *The Reliquary*, January, 1894, p. 9.

chancel, but it possesses the remarkable feature that it has Saxon archways opening on each of its four sides as if it were intended to be a central tower with transepts to north and south. The dimensions of these arches are as follows—The western is 6 ft. 10 in. in width by a height of a little over 14 ft.; the eastern 4 ft. 8 in. wide; the northern and southern

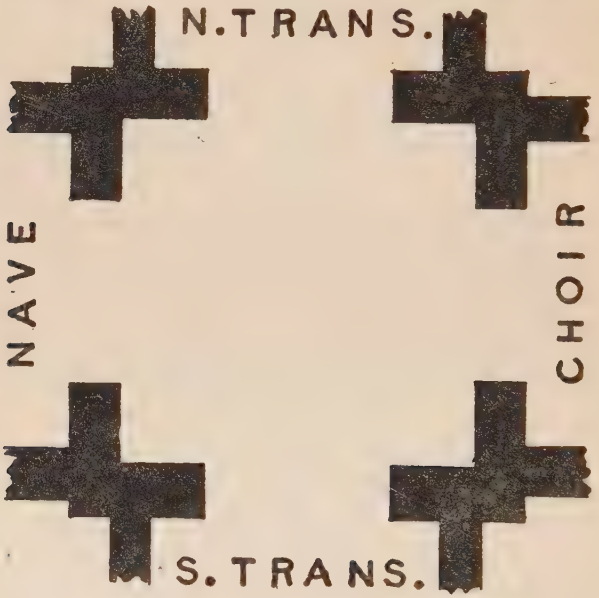


Fig. 146.—Sketch-plan of central tower at Stow, Lincolnshire, with parts adjacent.

each 4 ft. 2 in. There is no sign of contemporary side chapels or transepts. All these arches have plain square imposts with strip-work round the openings and long-and-short technique in the jambs.

(3) If the reader will turn to the plan of the Saxon abbey church at Peterborough, given in Fig. 172, postea, p. 315, he will see a transeptal scheme strikingly different from those hitherto studied. Here are no transeptal arches and no possibility even of a central tower, while the transepts are much ampler than the narrow presbytery, which excavations showed

could not have extended much further to the east than the side walls now indicate. This plan, noticed postea p. 238, is apparently an example of the crux commissa or T shaped scheme, known in Early Christian days, and stands out of the line of development just followed.

It is not the purpose here to enter into any analysis of these various schemes but only to indicate them as the data upon which must be based any discussion of the evolution of the cruciform plan.

XI. Churches with both a Central and a Western Tower.

The combination of the western with the central tower in the same building is a phenomenon of which account must be taken. It appears on a monumental scale in English Norman architecture at Ely, and the question naturally arises whether it is not an English form handed down from pre-Conquest days. There existed one conspicuous Saxon instance of it at the abbey of Ramsey in Huntingdonshire, dating about 970 A.D., of which a notice was given in the previous volume.[1] The accounts contained in the *Chronicle of Ramsey*[2] of the building of the abbey church are instructive enough to merit quotation.

The decision to erect a fine church upon this site in the Fens was arrived at in the summer of 968 and 'all through the following winter they are getting together all that the forethought of the masons demanded, whether in tools of iron or tools of wood, and everything else that seemed needful for the future building. At length when the winter is past, the storehouses are thrown open, the most skilled workmen available are brought together, and the length and width of the church which is to be built are measured out. The

[1] Vol. I, p. 245 f.

[2] *Chronicon Abbatiae Rameseiensis*, Rolls Series, No. 83, p. 38 f.

foundations are dug deep on account of the marshy character of the site, and the earth is beaten with many strokes of the rammer to solidify it for the support of the weight. The labourers, inspired as much by the warmth of their pious devotion as by the desire for pay, are instant with their toil; while some bring the stones others are mixing mortar, and a third party raises both stones and mortar aloft to the work by the aid of pulleys, and so with the help of the Lord the structure rises daily higher and higher.'

'Two towers soared on high above the roofs, of which the lesser one was at the western end, on the front of the building, and offered from afar a stately spectacle to those entering the island; while the greater one, in the centre of the cruciform structure, stood upon four pillars which were joined together pair and pair by arches thrown across from wing to wing to preserve the rigidity of the fabric. Compared with the old fashioned method of building which had before prevailed, it was a structure of no mean pretension.' The dedication of the church took place in November 974.

There is an additional notice of the same operations in a Life of Bishop Oswald of Worcester, the patron and inspirer of the work. It is there recounted how the bishop inaugurated the work of the church with the sign of the cross which is the pledge of our salvation, and how he accordingly began to construct the buildings on the site after the pattern of a cross. There was on the east on the south and on the north an arm of the cross (the Latin word is 'porticus' and the passage illustrates the wide usage of this term, see ante, p. 129 f.), and in the midst a tower which was sustained by these projecting parts. The church was then continued westward from the tower.[1]

As Ramsey was a direct result of the extension to England of the Cluniac movement of monastic reform[2] it is worthy of note that one of the two continental monasteries through which

[1] *Historians of the Church of York*, Rolls Series, No. 71/1, p. 434.
[2] Vol. 1, p. 228 f.

this movement chiefly affected England, Blandinium by Ghent, possessed in the tenth century a church with a western tower.[1]

With regard to other Saxon examples, it is possible that Deerhurst, Fig, 140, ante, p. 235, possessed at one time a central tower as well as the existing one to the west, and Mr. Micklethwaite claims that the incorporation of the old Roman pharos at Dover in the scheme of the cruciform Saxon church that lies to the east of it gave Dover also a western as well as its central tower.[2]

There is some indication that the Saxon monastic church at Chichester, to which the South Saxon see was transferred from Selsey in 1075, possessed a central and a western tower. The evidence is an ancient seal attached to the M.S. Cott. xii. 80, in the British Museum, and numbered 1469 in the Catalogue of Seals. Its interpretation is not however devoid of difficulty.

XII. The Twin-Towered Façade.

This scheme, prefigured at Aachen and employed in later Carolingian times (ante, p. 53 f.), became common, perhaps normal, north of the Alps, for the greater churches of the eleventh and following centuries (ante, p. 56). We should naturally look for examples in Saxon England, and here again we have the evidence of a seal on an Exeter deed of 1133, figured and discussed by G. Oliver in his *Lives of the Bishops of Exeter*. It shows two flanking towers and a central pavilion, and seems to represent the monastic church founded by Æthelstan and restored by Cnut about 1020 A.D. See Fig. 147.

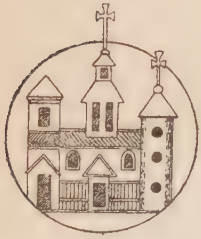


Fig. 147.—The Saxon Cathedral at Exeter.

[1] Van de Putte, *Annales Blandinienses*, Ghent, 1842, ad ann. 979.

[2] *Archaeological Journal*, liii, 327.

XIII. The Triple-Apsed Plan.

The termination of a church to the east with three parallel apses of which the middle one projects beyond the two lateral apses may depend on two different schemes of plan. The three apses may be the finish of a chancel and choir aisles, or they may result from a cruciform scheme when eastern apses are thrown out from the walls of the transept so as to flank the apse of an aisleless presbytery. Both these schemes are fairly early and widely diffused in the West.

In Saxon architecture the form may be indicated at the cathedral of Oxford, once the church of St. Frideswide's nunnery. Here in the eastern wall of the present north aisle of the choir are three blocked archways that were discovered some years ago by Mr. Park Harrison, who also found traces of corresponding apses. It is not certain what they indicate, but they may point to an eastern termination for the earlier Saxon church on the spot similar to one of those familiar on the Continent; that is, either a plan with three parallel aisles or with a transept with apses in its eastern wall, an alternative favoured by Mr. Micklethwaite.[1]

XIV. Aisled Churches.

Only four existing Saxon churches can be proved to have possessed side aisles, though this has been conjectured with more or less probability about one or two others. On the other hand we can infer from literary sources that the larger and more important churches, which have in nearly every case perished, were laid out with these additions. This we know to have been the case with the Saxon cathedrals at Canterbury[2]

[1] *Archaeological Journal*, LIII, 333.

[2] Willis, *Canterbury Cathedral*, p. 10.

and Winchester,[1] with the church at York described by Alcuin,[2] with Wilfrid's churches at Ripon[3] and Hexham,[4] while the mention of a column in the interior of the abbey church at Ramsey[5] may be taken as evidence in this case also.

The four extant examples are Brixworth, Northants; Reculver, Kent; Lydd, Kent, and Wing, Bucks. They are all pillar basilicas, in which the division between the nave and aisle is not formed as in the Italian churches and those of Africa by rows of columns, but by portions of the side wall left standing between the arched openings. Lydd, which is the simplest example, may be noticed first. The parish church of Lydd is one of the fine Gothic structures which make the district of the Romney marshes a favourite haunt of the ecclesiologist. A year or two ago it was discovered that the north-west corner of the north aisle of this well known church consists of part of the north and west walls of an early basilican oratory. Some of the arches and piers of the north arcade of its nave are visible in the present wall (Fig. 148). The span of the arches was about 4 ft., the width of the piers about 3 ft. 4 in. An arched opening about 7 ft. wide can be traced in the west wall, now the end wall of the north aisle of the mediaeval church. This, it has been suggested by Mr. Micklethwaite, who was the first to call attention to the remains,[6] may be the arch of triumph opening into an original western apse. This would furnish an interesting parallel to Silchester, to which

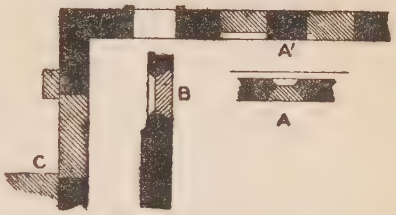


Fig. 148.—Saxon remains at the north-west corner of Lydd Church, Kent.

[1] Willis, in the 'Winchester' volume of the Archaeological Institute, p. 15.

[2] *Historians of the Church of York*, Rolls Series, No. 71/1, p. 394.

[3] ibid. p. 24. [4] ibid. p. 33.

[5] *Chron. Abb. Rames.*, Rolls Series, No. 83, p. 104.

[6] *Archaeological Journal*, LV.

perhaps as we shall presently see should be added Ripon and the earliest Canterbury. A round-headed opening, evidently double-splayed, exists in the old clearstory at A′, of which A gives the plan and B the section. The plan shows the remains with details. C is the later tower.

Brixworth, Reculver, and Wing all present features of special interest and importance and to these due attention must be paid. Brixworth is one of the largest and one of the most instructive of all our pre-Conquest monuments, but it has not come down to us in its original condition. On the one hand it has lost its side aisles though their previous existence is an obvious fact, but on the other it has received additions at one or more than one period later than that of its origin but still within Saxon limits. From the point of view of chronology this fact makes it of the highest value. Reculver, which had come down almost to our own time practically perfect, was ruthlessly destroyed at the beginning of the last century by one of the most shameless acts of vandalism ever perpetrated. Some details of great interest have however survived. Wing we are fortunate in possessing practically entire, with its nave, side aisles, and apse complete and in regular use, while beneath the presbytery exists a roomy crypt. It is not however so old a church by at least two centuries as the pair last mentioned.

The general appearance of Brixworth church as seen from the north-west can be judged from the view, Fig. 149, while in Fig. 151 is given the plan. It is a large somewhat gaunt structure, the plain square rudely constructed fabric of which is crowned by an elegant spire of the 14th century. The use of Roman materials is obvious at a glance. All the openings are turned in Roman bricks, which are also employed here and there in the rubble walling more especially at the corners. A few courses in the rubble work are laid herring-bone fashion. A little observation of the manner in which these bricks are employed will show that they were certainly not placed by Roman hands. Generally speaking in the larger arches there

FIG. 149.—Brixworth Church, from the north-west.

(To face p. 246.)

are two rows of voussoirs, one outside the other, separated by flat courses of bricks concentric with the curve of the arch. In the two rows of voussoirs the bricks are set edgeways, and should all point towards the centre from which the curve of the arch is struck. Since the bricks are even, the mortar joints should be wedge-shaped to secure the form of the arch. Here at Brixworth however the principle of the radiating joint in arch construction was evidently not understood by the builder, and the manner in which he started to turn his arches can be seen in Fig. 150, where the bricks that begin the arch are shown tilted up at a sharp angle and wedged in position by a pad of mortar. There was a Roman settlement of some kind at Brixworth as numerous finds have attested, and from Roman buildings these bricks must have come. It has been claimed for the structure itself that it is a Roman survival, but independently of its technique it is in form and character an Early Christian basilica and there is nothing about it that suggests a building turned from a secular to a sacred purpose. When we learn that the monks of Medeshamstede (Peterborough) established a monastic settlement here about the year 680[1] we have a date which, as we shall see, is in accord with the characteristics of the earliest parts of the building.

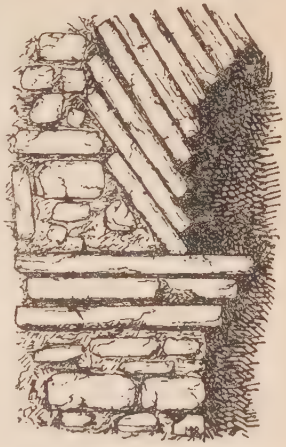


Fig. 150.—Springing of arch at Brixworth.

The elements of the structure consist in a square western tower with a half-round stair turret projecting from its western face, a nave, a prolongation of the nave by a presbyterial space, and beyond this to the east, not seen in the drawing, an externally polygonal apse. Along the side of the nave on the

[1] Hugh White, in Sparke's *Historiae Anglicae Script. Var.* II, 8.

ground story will be noticed a series of large arched recesses in each of which there appears a window. These are in reality the original openings which gave access from the nave to a north aisle. This north aisle, to which corresponded one on the south, must be restored in thought with its sloping lean-to roof abutting on the wall of the nave on a line marked by the sloping set-off in the wall under the upper row of windows. These last are the windows of the original clearstory, and are of a type uncommon in this country. They resemble the windows of the Early Christian basilicas of Rome and Ravenna in their openness and ample dimensions. The aperture is wider in the interior than it is outside, but the splay is nothing approaching to that which is seen in the ordinary internally-splayed lights of Late Saxon and of Norman times, while the actual width of the external aperture, which measures about 3 ft. in the clear, is much greater than we generally find in our Saxon buildings.[1] In comparison with the normal widely-splayed openings they present the appearance of being cut straight through the wall as is the fashion of the classical aperture. Strictly speaking they are not so formed, but exhibit, like all the windows we have been dealing with, the mediaeval feature of the splay. The stair turret is lighted by small square-headed openings, into the outer aperture of which were fitted stone slabs pierced with narrow loops. The suggestion has been made that these were loopholes for archers defending the church against attack. They do not however command the accesses to the building, and would have been almost useless for such a purpose. The plan of one opening is given in Fig. 154, postea, p. 255.

The tower is one of those that, like Barton-on-Humber, possessed doorways or at any rate arched openings on all its four faces. A detail not to be passed over can be seen at the bottom of the north-west corner of the tower—that nearest the eye in the view—and also at the corresponding south-west quoin.

[1] The windows at St. Peter-on-the-Wall are similar, ante, p. 117.

Here the attachment of walls thinner than those of the tower running in the directions north and south can be plainly seen, the lowest courses being in bond with the tower. These indications of buildings now destroyed at the western end of the church are important and must be taken in connection with similar marks seen elsewhere. Thus in the case of the two very early porch-towers at Monkwearmouth and Corbridge there are signs of similar structures, and these are more apparent still on the very late western tower at Netheravon in Wiltshire. The significance of these indications is a matter for further inquiry. It will be noticed in the view that the original nave arcade and the clearstory windows stop short before the eastern end of the nave is reached. The walls of the side aisles, the foundations of which have been laid bare, also stopped at the same point, and these are the external signs of a peculiar feature of the interior plan which will presently receive attention.

The church is entered through a round-headed doorway at the western extremity of the south wall of the nave that is inserted into one of the old arcade openings to the side aisle. The interior view of the church looking eastward reveals a temple of imposing size with a length to the altar of more than a hundred feet and a width of over thirty. The space is however not unbroken, for at a distance of about sixty feet from the western end there is a cross wall now broken by a single wide pointed arch dating about the year 1400. Originally, as was proved by excavations in 1841, there was here an arcade of three arches supported by two intermediate piers and by the piers which still exist as projections from the north and south walls. This screen cut off a space of, roughly speaking, thirty feet square before the arch leading into the apse. In the north wall, just on the eastern side of the projecting pier, there is a narrow doorway 3 ft. wide, now blocked, and this would have led either into the open, or into some sacristy or similar building at the eastern end of the

north aisle which stopped at the level of the projecting piers. What there was in this part on the south cannot be known as there is here a later mediaeval south chapel, and this, with the exception of the roof, the upper part of the tower and the spire, is almost the only portion of the structure that is not original, or at any rate restored, Saxon work. Passing on still eastwards we come to the apsidal presbytery in connection with which there is more than one point of interest.[1] The arch of triumph, to use basilican terminology, is 9 ft. 8 in. wide with a height of nearly 22 ft. above the floor in front of it, and gives access to a chancel with an apse bounded internally by a semicircle but on the exterior by five sides of a polygon. A straight piece of wall before the semicircle and the polygon begin gives additional depth to the presbytery which measures 19 ft. 2 in. from west to east by a width of 18 ft. At the external angles of the polygon there are buttresses 18 in. wide with a projection of 6 in. that are neatly cut to the form required. Of the actual walling of the apse only a portion on the north is original the rest being a restoration. A buttress occurs however in the original work, and included in this also there was a round-headed window, now blocked and invisible, the situation of which is seen on the plan. There is no sign that the apse ever was vaulted. The present roof is of plaster.

Returning to the west of the arch of triumph we notice on either side of it a round-headed internally-splayed window, and beneath these on each side a very low blocked doorway. On the exterior it is seen that these doorways once opened on, or rather *in* a flight of steps, for these must have begun within the church, that led down to an ambulatory or passage round the outside of the apse the level of which is about 6 ft. below the floor of the church. As can be seen on the north side this

[1] There is a valuable paper 'On the Chancel of Brixworth Church' by Sir Henry Dryden, in *Ass. Soc. Reports*, 1890, from which some of the measurements and details given in the text and in Fig. 152 have been derived. The paper notices previous publications on the church.

passage was originally vaulted over and formed below ground a covered way round the apse that corresponded with the semicircular passages round, but as a rule *within*, the circuit of apses in Early Christian churches on the Continent. Such passages generally give access to a small chamber called a 'confessio'[1] excavated under the floor of the apse for the recep-

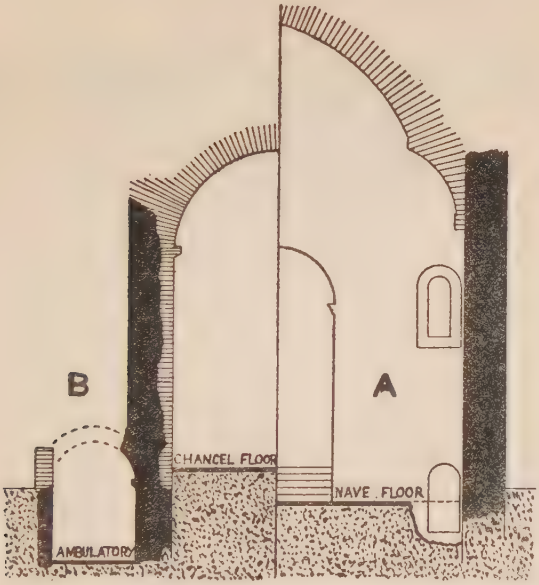


Fig. 152.—Sections at eastern end of Brixworth.

tion of a sarcophagus or relics, but investigations have not revealed the presence at Brixworth of any chamber of the kind. On the other hand in the exterior wall of this ambulatory which is partly original there are two arched recesses that seem intended for tombs, and correspond to the 'arcosolia' of the Roman catacombs. The arrangement of the presbytery and ambulatory, with the different levels, can be seen in the outline sections in Fig. 152, where A shows a section in front of the arch into the chancel, and B a section through the north wall

[1] From 'confessor,' 'martyr,' as the place where the remains of such a holy personage were bestowed.

of the chancel and the ambulatory. The springing of the vault over the latter is clearly visible on the existing wall.

Turning now our steps westwards we are confronted by the western tower and by certain problems which connect themselves therewith. The view Fig. 153 (in which the modern pews and other fittings are ignored), shows the thoroughly basilican aspect of the interior, in which we must imagine the arches of

Fig. 153.—Interior view of Brixworth, looking west.

the ground story opening into side aisles. The western end must now engage our attention. We see there on the ground story a doorway of entrance of a moderate size less than 5 ft. in width, but in the wall above it there are the marks of the springing of another arch apparently of about the same span the crown of which, as seen on the western face of the wall, rose to about 20 ft. above the floor. It will be remembered that traces of a blocked opening of much the same kind and position and of considerable width has come to light in the west wall of the nave of St. Martin, Canterbury (ante, p. 121).

It is conceivable though unlikely that we have to deal in each case with a single very lofty arch of entrance. The arch of the present western doorway at Brixworth presents however no signs of having been inserted.

Higher up than the indications of this blocked archway comes a triple opening the arches of which are divided by baluster shafts of a form already illustrated in Fig. 114, ante, p. 198. This opening cannot have coexisted with the archway just below and must be of a comparatively later date, which is also indicated by the form of the baluster shafts. Up to this point we have not found at Brixworth any of the familiar Saxon details such as pilaster strips, long-and-short work, or balusters. The appearance of these shafts is a sign that additions have been made in Saxon times to the main fabric, and we are led to remind ourselves of the probable history of the church. Founded about 680 as the church of a monastic settlement, but at the same time no doubt a parish church, and indeed from its size and situation a sort of mother church for the whole district, it was partially destroyed and rendered for a time useless by the heathen Danes.

At a later period, probably near the days of revival under king Edgar, the fabric was restored to use but only as a parish church, and with the sacrifice of the side aisles, without which the building was of ample size for its purpose. To this epoch will belong the western opening with the baluster shafts.

How much, we may ask, was done at this time? It is natural to think that the whole tower, or at any rate the middle part of it, may be of the same date as the triple opening. Let us study this question in the tower itself.

Entering this we note on the ground story the four openings on the four sides of the square. Of these the western one is now a mere doorway 3 ft. 6 in. wide, situated to the south of the middle of the wall and giving access to the turret staircase, but marks in the wall show that it was originally a wide and lofty archway central in the wall, 6 ft. 8 in. in span with a height

of 12 ft. 5 in.—a monumental outer portal to the imposing interior. It is quite clear therefore that just as the triple opening is later than the original western wall, so the stair turret is posterior in date to the ground story of the tower. What was the arrangement of this ground story before the turret was built? This question connects itself with that of the purpose of the subsidiary structures which were attached as we have seen to the western corners of the tower, and must not be entered on here, but the suggestion cannot be put aside that the lower part of the tower was originally a porch with a wide western doorway, and that the walls were carried up later in a tower form. The ground story of the tower, at any rate, with its western arch and with the now blocked archway in the western wall of the church noticed above, appears contemporary with the rest of the fabric. An examination of the lower part of the western wall of the nave, in connection with the parts of the tower that are on the same level, exhibits such marked similarity in material and technique that all these parts must be of the same epoch. It is clear that the lowest story of the tower was a western adjunct of some kind. The date 680 is too early for us to think of a western tower, but this feature would agree very well with the time of restoration, when we must suppose the walls of the western adjunct carried up in the form of a tower, and the triple opening cut in the west wall of the church.

The most natural explanation of the stair turret would be that it was made to provide easy access to the chamber in which was the triple opening, and we must accordingly assume it to be contemporary with the tower, though it has often been placed at a later date. One thing is clear, the doorway, about 3 ft. wide, that now gives access from the turret to the chamber with the triple opening must have been made in connection with the stair, for like the similar doorway on the ground story it is not in the middle of the wall, while, as the plan of this stage of the tower, Fig. 154, will show, the tower and

turret seem very much of a piece. It is greatly to be deplored that the original belfry openings have not been preserved in the upper stage of the tower, as the details here might have furnished a valuable criterion as to date.

It is not necessary to describe the plan of Reculver or to enter on the question of the treatment of the building in modern times. Of both there is a full account in Mr. Romilly Allen's *Monumental History of the British Church*.[1] It was a simpler structure than Brixworth, a pillar basilica terminating with a semicircular apse, about 75 ft. in interior length, with a nave and an apse 24 ft. in width. It is noteworthy that the original concrete pavement is said to remain below ground over almost the whole of the interior, and this is faced with fine plaster made with red pounded tile and brought up to a polished surface.[2] The same sort of material, obviously a survival of Roman technique, covers, it will be remembered, part of the walls of the nave of St. Martin, Canterbury. Opus signinum similar in appearance may be seen on the floors at Uriconium and other Roman sites. The chief interest of the church is the treatment of the feature which in the basilicas of the Romanized West generally is called the arch of triumph. This is the archway which gives access to the apse, and is normally a single span the full width of the apse, the semi-dome of which abuts against it. Here however in place of a single arch spanning the nave at its eastern limit where the presbytery begins, there was an arcade of three arches that was brought forward a few feet into the nave so as to screen off a space before the apse. The three arches rested in

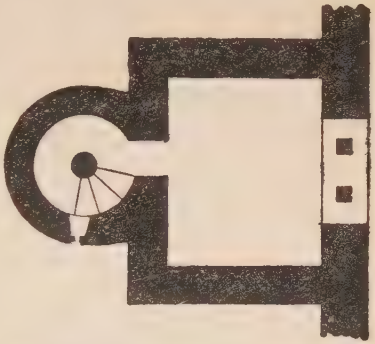


Fig. 154.—Brixworth Tower at level of triple opening.

[1] London, 1889, p. 13 f.

[2] *Archaeologia Cantiana*, xii, 248.

the middle on two detached columns that are among the most interesting and at the same time puzzling monuments that have come down to us from Saxon times. The plan, Fig. 155, gives this part of the building. The Saxon work[1] is shown in black and the dotted lines extending eastward beyond the apse

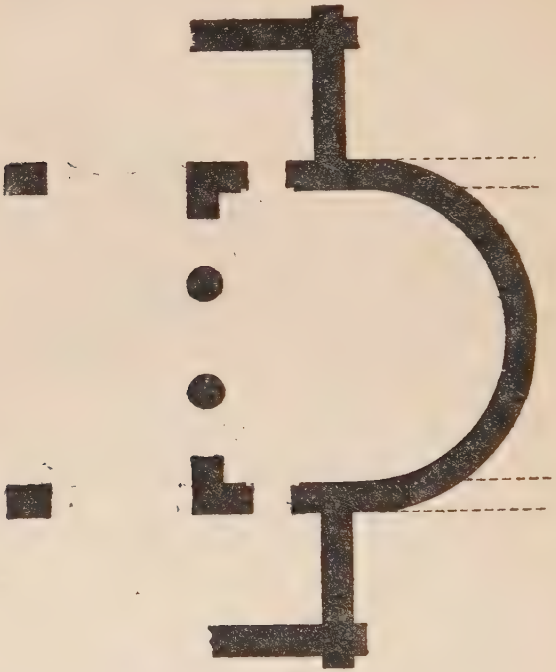


Fig. 155.—Plan of Saxon work at the eastern end of Reculver Church, Kent. From plan by George Dowker, F.G.S.

indicate the Early English chancel of considerable length that was substituted for the apse in later mediaeval times. The screen of three arches was allowed to stand while the apse itself was removed, and remained till the destruction of the church in the early years of the nineteenth century. The columns

[1] Identified as such by Mr. George Dowker, and published by him in *Arch. Cant.* loc. cit. Much of the walling now seen above ground on the site is later than Saxon times.

which divided the openings, after some migrations, were recovered through the agency of the late Dr. Sheppard of Canterbury and now stand in the garden to the north of the north transept of Canterbury cathedral. Till quite recently they were accepted as Roman work, and on the strength of this assumption Reculver, like some other Saxon churches, was supposed to be in part a Roman secular building turned at a later date to Christian purposes. On this theory in general a word will be said on a later page, but apart from this, there is no reason why Roman columns should not have been used in a church itself of Saxon date. The Roman origin of the columns has however been contested, and the leading English authority on Roman architectural remains, Mr. G. E. Fox, has brought forward very forcible arguments against a Roman ascription.[1]

A word about Saxon columns in general may here be introduced. The subject is one of some importance, in view of the theory that the use of large round piers of columnar shape in Anglo-Norman architecture is due to a traditional familiarity with this feature on the part of Saxon builders. As a matter of fact, notices of the employment of such columns in pre-Conquest buildings, as well as actual examples, are singularly hard to find. Wilfrid used columns in the seventh century in his churches at Hexham and Ripon,[2] and in both these cases, no doubt, he derived them from the Roman stations on the Wall and in Yorkshire. The church begun by Archbishop Ælbert at York in the eighth century was also 'solidis suffulta columnis,'[3] but we hear nothing of columns in connection with the later work at Winchester in the tenth century, or at Canterbury.[4]

[1] In a letter to *The Builder* of Oct. 20, 1900, and in *Archaeological Journal*, LIII, 355.

[2] *Historians of the Church of York*, Rolls Series, No. 71/1, pp. 24, 33.

[3] *Historians*, etc. loc. cit. p. 394.

[4] See the 'Winchester' Volume of the Archaeological Institute, 1845, and *Canterbury Cathedral*, Lond. 1845, both by Professor Willis.

Of columns proper actually in use as supports in Saxon structures there are the four in the crypt at Repton, which have twisted monolithic shafts, round discs for bases, like those of Egyptian columns, and square capitals rudely chamfered off to fit the top of the shafts. Besides these there are preserved in the porch of Repton church two shafts built up of drums with similar capitals, that may have stood originally in the openings between nave and transepts or transeptal chapels. The only other examples that can be referred to are these two much discussed columns from Reculver church. They must be either Roman or Early Saxon. Mr. G. E. Fox considers that they are probably Saxon imitations of Roman work ;[1] but considering the limited technical capabilities of the Saxon builders, it is difficult to see how they could have executed such careful work on so large a scale, for the columns are more than 16 ft. high, and the shaft is everywhere within an inch of 7 ft. in circumference. The absence of tapering and entasis is quite abnormal for Roman shafts of this size and finish, though the ruder monoliths already referred to in some churches in the north appear to be devoid of these refinements (ante, p. 8). It is true that no Roman parallel can be quoted to the form of the caps and bases, and that they both look barbarous beside the attic base of the Roman shaft to be seen at St. Pancras, Canterbury, in a position corresponding to that once occupied by these columns at Reculver. If we assume however that the capitals were intended ultimately to receive enrichments in gilded bronze, there is nothing unclassical about them or about the bases, which after all are not so utterly unlike in profile to some forms of the grecian ionic base. It is moreover just as hard to find for the columns Saxon as Roman affinities, and till something resembling them is found elsewhere, it will be best to reserve the question of their origin as still unsettled. The undercutting of the lowest member of the neck-moulding should in this connection not be overlooked, as the only Saxon parallel

[1] *Archaeological Journal*, LIII, 355.

known to the writer is a moulding on the south door of the pre-Conquest tower at Barton-on-Humber. If these columns are to be reserved, we are left with the Repton examples as the sole monumental evidence for the supposed predilection of the Saxon builders for this feature. There is no Saxon columned basilica like the Mauritius-Kirche, near Hildesheim in Germany. (See Fig. 156.)

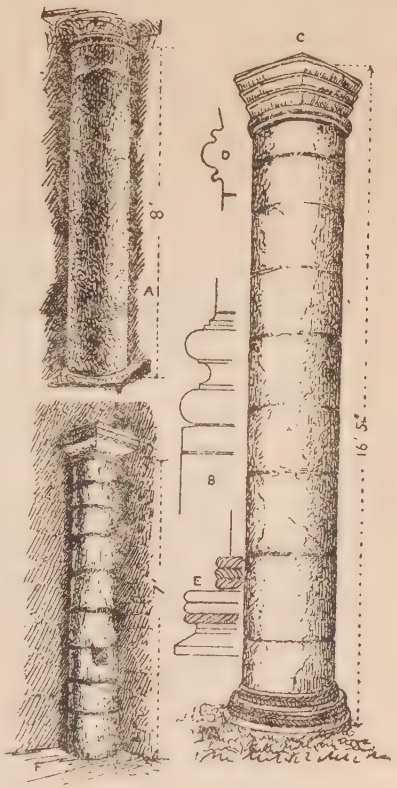


Fig. 156.—Roman and Saxon columns.

A. Roman monolithic shaft in Chollerton Church, Northumberland.
B. Base of Roman column at St. Pancras, Canterbury.
C. Column from Reculver Church.
D. Moulding below capital.
E. Base.
F. Column at Repton Church, Derbyshire.

The last of the existing aisled churches to be noticed is situated at Wing in Buckinghamshire. This has preserved its basilican plan, the eastern portion of which is shown in Fig. 160 postea, p. 268, but has suffered the loss of all its ancient openings, save a small blocked doorway at the end of the north aisle and a very interesting double window with a mid-wall shaft in the east wall of the nave above the presbytery arch, that has been already figured (Fig. 116 ante, p. 199). The external view of the church (Fig. 157) shows it a handsome modern-looking edifice without any Saxon character which would catch the eye. The later windows and the tower account for this. The polygonal apse is the most prominent

feature in the view, and this it will be observed has round it a shallow arcading connecting a series of pilaster strips. Underneath the whole area of this presbytery extends a crypt that will presently be noticed. Openings to it can be seen low down in the walls of the apse.

Although this treatment of the types and features of Saxon churches is intended only to embrace existing monuments, some reference must here be made to an important aisled

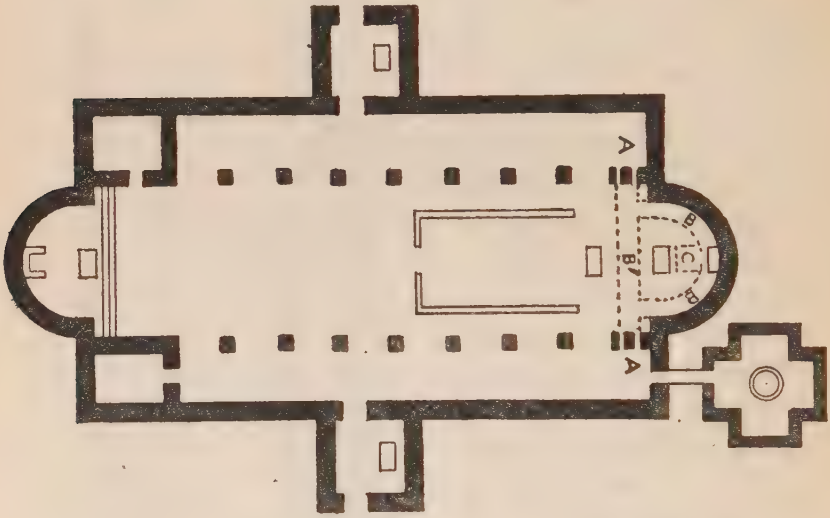


Fig. 158.—Willis's Plan of Saxon Cathedral at Canterbury, with some modifications.

building, only known from descriptions, but known with sufficient clearness to entitle it to rank as a definite example. This is the Saxon cathedral church at Canterbury, of which Professor Willis evolved a plan from documentary evidence interpreted by him with his usual sagacity.[1] The plan here offered (Fig. 158) is based upon that of Professor Willis, but there have been introduced some slight modifications. Thus the baptistry, or chapel of St. John, erected in the middle of the eighth century at the eastern end of the church, has been

[1] *The Architectural History of Canterbury Cathedral*, Lond. 1845, p. 27.

Fig. 157.—Wing Church, Bucks, from the north-east.

(To face p. 260.)

made cruciform instead of octagonal. As the chapel had to serve for sepulture as well as for baptisms and other more secular purposes (Willis, p. 2), the cruciform scheme would be more convenient as supplying 'porticus,' as well as more in accordance with tradition.[1]

Again, the porch-towers, with the chapel of St. Gregory below the southern porch-tower, have been arranged more in accordance with known Saxon precedents. The plan of the crypt, indicated by dotted lines and the letters A, B, C (Fig. 158), has been drawn on a somewhat different scheme from that indicated in Willis's commentary (see postea, p. 267).

The main features of the structure are distinctly indicated in the documents. It possessed 'alae' or aisles, an apse at the east over the crypt, and various altars and flights of steps all clearly indicated in the original authorities which are printed by Willis in the opening pages of his work. There is no absolute indication that the church terminated towards the west in an apse, but the description makes this almost certain.

The question how the building came to assume the form indicated on the plan is one to which a little attention may be directed. Bede tells us that Augustine recovered in Canterbury a church which he had learned was originally constructed by the labour of Roman believers, and constituted this as his episcopal seat.[2] We have reason therefore to assume that the oldest part of the church was pre-Augustinian, though Augustine may have added to or altered it. The baptistry or chapel of St. John was erected by Archbishop Cuthbert, 740-758, while Archbishop Odo, 940-960, restored and heightened the edifice and modified the arrangement of the altars. Finally the church was ruined by a conflagration in 1067, and its remains seem to have been entirely cleared away by Lanfranc.

With the case of Silchester before us we may readily credit

[1] Vol. I, p. 166. [2] *H.E.* i. 33.

the pre-Augustinian church with a western orientation, and the fact that the western end at Canterbury was raised some steps above the body of it, though there was no crypt in that part, may be explained on the analogy of the churches of North Africa where this raising of the altar end is not infrequent.[1] At Canterbury the episcopal throne was against the western wall of the church, and the altar was away from the wall in front of it, an arrangement normal in the earliest Christian edifices. We may regard therefore this western part of the Canterbury church as a relic of Romano-British Christianity, while the basilican arrangement of nave and aisles may also be referred to the same source.[2] The lateral adjuncts however with the south door, reminding us as they do of St. Pancras and of later Saxon plans, would appear to be additions made probably in the seventh century. At this time the adjuncts would at most be only porch-chapels, not towers. The south door, a later feature than the lateral chapel, may have been pierced in the southern wall of the chapel at a subsequent date.

This suggestion for the early history of the church is borne out by the fact that the baptistry of the eighth century was erected at its eastern end. There is no reason for a baptistry to be placed toward any particular point of the compass, but there is a reason why the arrangements for this rite of admission to the Christian community should be located at the entrance end of churches. Hence we may infer that the eastern end of the church was at this time its place of entrance. Odo in the extensive works he carried out, which are said to have occupied three years, re-roofed the edifice and renewed and raised the upper part of the walls. Though we are not told that he altered the eastern end, we may conjecture that the apse in this part, with the crypt and confessio below it, was his work.

[1] Gsell, *Les monuments antiques de l'Algérie*, II, 138.

[2] If Odo in the tenth century had added aisles to a single-celled church some mention would have been made of this in the notice of his work. At the time he took it in hand it is indicated as the largest church in the city.

Such a crypt was impossible at the Romano-British epoch, though it might have been constructed in Augustine's time or in the eighth century. In either case the eastern would have ceased then to be the side of entrance, and the location there at the latter epoch of the baptistry would be unlikely. The apse and crypt are probably therefore later than the baptistry.

The form of the crypt was evidently that of a curved passage, BB on the plan, following the line of the apse and communicating with a chamber or confessio, c, at the eastern limit. Such passages and chambers are found in Italy at an early date,[1] but there is an example at Werden a.d. Ruhr in Rhenish Prussia that belongs to the ninth century. Not only the plan for the crypt, but the arrangement of the eastern end generally, might well have been derived by Odo from Germany, for such a duplication of the apse, by repeating it at the end of the building opposite to the original one, was, as we have already seen, a characteristic Austrasian feature, and in this connection it may be noted that the Early Saxon church at Abingdon had also an apse at each end.[2] At the same time that Odo heightened the walls of the church he may have built towers on the walls of the already existing lateral porches.

XV. Crypts.

The last subject on the list is that of the Saxon Crypt. It is in one sense the most satisfactory to deal with, for the examples are few in number and comparatively well-known, while they present a series of types that are of value in connection with the chronology of Saxon architecture in general. They are types that occur in numerous examples on the Continent where it is possible to fix their approximate dates, and

[1] St. Peter, Rome, of doubtful date; Sant Apollinare in Classe, Ravenna, sixth or seventh century; SS. Quattro Coronati, Rome, ninth century.

[2] *Chronicon Monast. de Abingdon*, Rolls Series, No. 2/2, p. 272.

this naturally casts a welcome light on our own architectural problems. The known and existing Saxon crypts are those at Ripon and Hexham, at Brixworth, at Wing, at Repton, and at Sidbury in Devonshire, while to these should be added the crypt in the Saxon cathedral at Canterbury, which is of use as giving a form not fully represented in any other British example.[1]

The crypts at Ripon and Hexham, Fig. 159, are beyond doubt the work of Wilfrid, who was engaged upon the churches between the years 671 and 678, and we possess a contemporary notice of them from the pen of the bishop's own choirmaster Eddius. Eddius tells us about Hexham church that in its lower parts it contained certain chambers in the earth wrought of well-polished stones, and about Ripon that it was built of smoothed stone-work from the foundations in the earth up to the summit.[2] Structures in each case of almost exactly the same kind are seen at this day below ground on both of these sites, and except in Wilfrid's time there has never been any special connection between the places. When we find that these structures agree in style with the types current at that period in Europe generally, and in technique and material, at any rate at Hexham, with the special conditions of Wilfrid's work, there is no difficulty in deciding that we have before us what Eddius saw and described. There are indeed but few Early Christian monuments in Western Europe of which the date can be fixed with a certainty so absolute.

Both at Hexham and Ripon the crypts are of a kind that have no necessary connection with a church, but occur in

[1] There was a crypt under the chancel of St. Olave, Chichester, a church that still keeps a Saxon-looking south doorway, but no signs of this crypt are now to be discerned. Other Saxon crypts probably exist and await discovery.

[2] — cujus profunditatem in terra cum domibus mire politis lapidibus fundatam. *Vita Wilfridi*, c. xxii. *Historians*, etc. p. 33.

— polito lapide a fundamentis in terra usque ad summum aedificatam. ibid. c. xvi. *Hist.* p. 25.

Fig. 159.—Crypts of Wilfrid at Ripon and Hexham. (The Hexham crypt is from a plan by Mr. C. C. Hodges.)

A, A. Passages of access, now partly blocked.
B, B′. Vestibules.
C. Main chamber or confessio.
D. (Ripon), Hagioscope ; (Hexham) stair from the west.
E. Aperture in crown of vault (there was an opening of the kind also in B at Hexham).

The spaces C, and B (Hexham), are covered with barrel vaults; B (Ripon) with a half barrel vault; B′, B′ (Hexham) with straight-sided vaults. The passages have flat stone roofs.

simpler forms in Early Christian graveyards on the Continent (ante, p. 33). There is in each case an underground chamber, c, 12 or 13 ft. by 8 ft. covered with a barrel vault, with niches in the walls for the display of lamps. This was intended for the safe preservation and exhibition to the faithful of relics. Access was gained through antichambers BB′, and these communicated by narrow passages and flights of steps with the church above at AA. The antichamber B at Ripon is covered with a half-barrel vault in which there was an aperture at E. In the case of Ripon there is some indication of an opening, D, through which the faithful might gain a view into the crypt from the church above without actually making the descent, and if this be the case it would be clear evidence that the church was oriented towards the west. At Hexham D marks the beginning of a third flight of steps leading directly down towards the main antichamber B. In neither case can the connection of the crypt with the church be clearly made out.

At Hexham the stones used in the construction are Roman, and many of them bear marks of Roman tooling and manipulation, while some exhibit carved ornaments and inscriptions. This is exactly what would be expected from the situation of Hexham close to important Roman stations. At Ripon, where Roman material was not readily available, the stone is expressly cut for the purpose and the technique here is sound and workmanlike. The walls and roofs throughout were intended to be plastered, and this material remains in parts in good preservation. It will be noticed that the passages of access are planned on rectangular and not curved lines. This does not prove, though it certainly suggests, that the churches above had rectangular and not apsidal terminations. Rectangular crypts under apsidal presbyteries are not unknown. It should be noted that the southern passage of access at Ripon is only in its eastern part original. The letters A, A indicate where more modern work has at two periods been added.

Equally early in design is the form of crypt already illustrated at Canterbury, Fig. 158 ante, p. 260, and at Brixworth, Fig. 150 ante, p. 246. At Canterbury the passage followed the inner sweep of the apse and is described in the words via una quam curvatura cryptae ad occidentem vergentem concipiebat;[1] at Brixworth it ran round outside the wall of the apse and was covered by a vault that abutted on this a little above the level of the ground. At Canterbury there was a chamber or confessio, c, to which this passage gave access, but no such chamber has been found at Brixworth. We know however that crypts were sometimes made under existing churches, and this was necessarily the case when a church had been erected in Early Christian times before the cultus of relics came into vogue. In our own country at Winchester in the tenth century crypts on a somewhat extensive scale were apparently formed under a church already built.[2] At Brixworth the ambulatory seems contemporary with the presbytery itself, but it may have been intended to excavate the confessio afterwards. The ambulatory at Brixworth is entered from the two ends. At Canterbury to judge from the description the two ends were joined by a straight passage, B′, Fig. 158, forming the chord of the arc, but the position of the stairs or stair of access is not indicated. Their location at AA, Fig. 158, is conjectural but in accordance with precedent.

The history of the crypt in general in European architecture exhibits a gradual opening out of originally confined spaces. The single vaulted chamber, a copy of a familiar form of the pagan Roman tomb, comes first, and narrow doorways or windows for inspection are the only openings in its walls. Later on the inner space grows larger to accommodate an increasing store of relics, and the wall is broken up into a series of piers between arched openings giving on the ambulatory. This stage of development is well represented

[1] Willis, p. 10, note.

[2] Willis, in the 'Winchester' volume of the Arch. Inst. 1845, p. 13.

in the noble Early Romanesque crypt at Montmajour near Arles.

In our own country the crypt at Wing, Bucks, presents the same appearance though the technique is ruder. The plan is given in Fig. 160, where it will be seen that the voids, with the

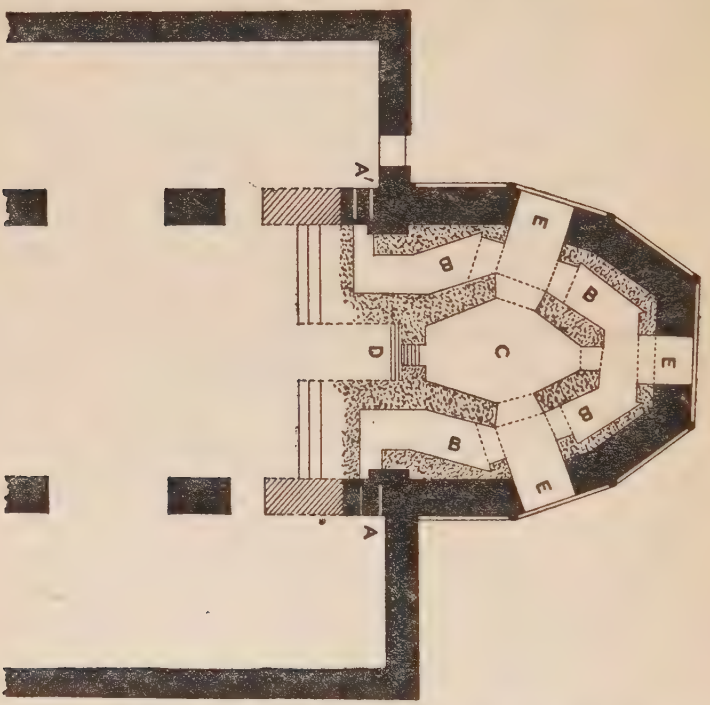


Fig. 160.—Eastern part of Church at Wing, showing the crypt in its relation to the structures above.

necessary piers for the support of the floor above, fill the whole space within the walls of the apse. There is an ambulatory, the access to which from the upper church was by stairs at A and A′, the opening for that at A being still to be seen. Furthermore towards the central chamber of the crypt, C, the old confessio, there opened a window of inspection, or hagioscope, D, visible now in the interior of the chamber, C. Though the church has been much modernized, the old arrangements can

easily be made out and the levels offer no difficulty. The top of this western opening, or hagioscope, in the crypt is about level with the present floor of the nave and a little to the east of the chancel arch, so that access to it must have been gained by steps down from the nave-level in the centre of the flight which ascended on each side to the presbytery. This arrangement is indicated on the plan, which represents in parts the result of investigations made when the church was under restoration, e.g. the shaded parts in the arcade between nave and aisles show what in Saxon times was solid walling. EE are openings that communicated with external tombs, or arcosolia, now destroyed.

A further stage in the development of the crypt is reached when the heavy piers disappear and the necessary support to the roof is given by columns. This is what the Germans call the 'Hallenkrypta' and it is the characteristic form in advanced Romanesque architecture. The crypt under the altar end at Ste. Trinité, Caen, of the middle of the eleventh century, is a central example. Lastingham; St. Peter, Oxford; the cathedrals of Canterbury, Rochester, Worcester, Gloucester, Winchester, present us with Anglo-Norman specimens. It is not asserted here that the columned crypt is never found at an earlier date than is indicated in these examples. The crypt at Jouarre in France, which is of this kind, is ascribed by M. Enlart to the seventh century, and there are Early Romanesque instances in Germany. At the same time its place in architectural development is comparatively late, and for any example of the form in connection with Saxon structures an advanced date may be assumed. The only Saxon Hallenkrypta occurs at Repton, under a square-ended presbytery the external pilaster strips of which betoken a Late Saxon origin. The crypt,

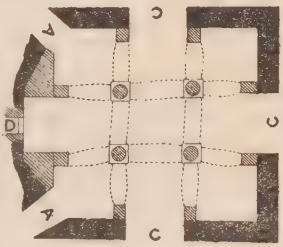


FIG. 161.—Plan of crypt at Repton.

square in plan, Fig. 161, is covered with rudely constructed vaults, partly groined, partly segmental, with transverse arches resting on four central shafts and on projecting wall piers. The columns were noticed ante, p. 258. Passages of approach, one of which is still in use, opened from the two sides of the presbytery AA, and there existed as at Wing, a central hagioscope D. Noteworthy features, which also occur at Wing, are openings in the external walls of the crypts to north, south and east communicating no doubt with tombs situated on the exterior. There are indications of such tombs also in the outer wall of the ambulatory at Brixworth, Fig. 150 ante, p. 246.

The architectural history of the crypt at Repton, as of the church above it, is obscure. There are obviously two periods of work in the upper parts of the crypt, but both appear to be late and not to be separated by any long distance of time; on the other hand the masonry lining the lower walls of the crypt, at the eastern end, which is of large well-fitted stones, has been claimed as a possible relic of the pre-Danish monastic church (see vol. I, pp. 223, 227).[1]

Finally at Sidbury in Devonshire there has recently come to light a small crypt of yet another form. Some details of this as well as its relation to the work above it betoken a Saxon origin.

[1] Repton forms the subject of a monograph by F. C. Hipkins, F.S.A., Repton, 1899. Mr. J. T. Irvine gave much attention to the church and valuable drawings and plans of it are in the possession of the Society of Antiquaries of Scotland. Papers on it from his pen appeared in the Derbyshire Archaeological Society's *Journal*, vol. v., and in the *Journal of the Archaeological Association* for 1894. Mr. Irvine doubted if the latest work in the crypt, including the columns and vault, was Saxon. An examination however of the external masonry of the eastern portions of the church, so far as they are preserved, indicates that they are all of the Saxon period. The north-eastern quoin of the nave (or of the tower if such existed) is treated just like the north-eastern quoin of the chancel, and the horizontal string course on the chancel can be traced round the former quoin and on to the north transeptal chapel. A Late Saxon date will suit both the columns and vault of the crypt and the rest of the walling better than a Norman date. Into other points of interest about the church and crypt there is no space to enter.

It consists in a square chamber measuring about 10 ft. on each side, with a single stair of access towards the nave. This is not in the centre of the west side but to the north of the centre, so as to leave space to the south for a corresponding set of steps up from the level of the nave to the chancel. The floor of this which formed the roof of the crypt must have been of wood, for there are no signs of a vault. No niches or other features have been discovered (Fig. 162). The square-ended chancel above is Norman, and the crypt had apparently been filled in when the Norman walls were built, so that this fact, coupled with clear signs of Saxon technique in the jamb of the opening from the crypt to the stair, is good evidence of date.

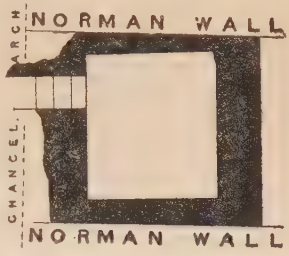


Fig. 162.—Crypt at Sidbury, Devon.

As regards type, we have here a form showing a still further advance in the direction of openness than even the columned crypt. This latter is as a rule only approached by two narrow passages, but in the form before us the crypt is open in front to the church and is directly accessible by comparatively broad stairways. In its monumental development the type is familiar in such examples as those at San Miniato, Florence, and San Zeno, Verona; and it is interesting to meet with the same type on a minute scale in an English country church.

CHAPTER VII

AN ESSAY IN CHRONOLOGY AND HISTORY

In the foregoing chapters there has been no attempt to offer a connected history of Saxon ecclesiastical architecture. The aim has been (1) to lay before the reader a collection of facts, grouped on some intelligible principle, that would serve as a groundwork for historical treatment, and (2) to offer hypotheses on which a consistent theory of this architectural phase might ultimately be constructed. The object before us now is to sketch the history and theory of Saxon building on the basis of the facts now ascertained and with the aid of the hypotheses already placed before the reader. It is desirable if possible to establish a chronology of the whole architectural period, and at the same time to fix the position of our pre-Conquest work in the general development of European architecture.

The available chronological tests are those based on general appearance, technique, proportions, plan, and details. Of these the last test is in practice the most satisfactory. Inferences drawn from general aspect, or from the apparent place of a monument in an assumed scheme of development, are seldom really so cogent as the more direct testimony of some definite feature or piece of characteristic detail. It is proposed therefore in the first place to base this attempt at

chronology on details, and then to test the resultant scheme by the other criteria just enumerated.

As a starting point we may take the fact that at the present time most of those who have specially studied Saxon monuments are agreed in assigning an early date, in general terms the seventh century, to the following examples, St. Martin and St. Pancras, Canterbury (ante, pp. 119 ff.); Rochester (p. 119); Lyminge (p. 118); Reculver (p. 255); Brixworth (p. 246 f.); the crypts at Ripon and Hexham (p. 264 f.); Escomb (p. 110 f.); Monkwearmouth (p. 140 f.), and Jarrow, and to this list many would add Bradford-on-Avon (p. 132 f.), and some Peterborough (p. 314 f.).

The evidence for the early date of these remains stands somewhat as follows. They have this in common that, with the exception of Bradford-on-Avon, they are distinguished by the absence of certain features which are common in Anglo-Saxon churches generally. We do not find in them long-and-short quoins, double windows with mid-wall shafts, double-splayed lights, pilaster strips, strip-work surrounding openings, plinths, nor, we may add, internally-splayed loops of a tall narrow form.[1] If these features can be proved to be late, the absence of them may be taken as furnishing a presumption of comparative antiquity; while on the other hand, if the buildings that lack these features can be shown on independent evidence to be early, this fact is evidence that the features themselves are comparatively late. It is of course no use to argue in a ring, and to endeavour to prove X early by the absence from it of Y, and Y late because it does not appear in X. We must seek for some

[1] Internally-splayed lights occur both in the earlier and in the later Saxon periods. In the earlier they are comparatively wide in comparison to their height, e.g. west wall at Monkwearmouth, in the later they become tall and narrow, as at West Hampnett, Sussex, and approach a shape that occurs in Early Norman work, as at Darenth, Kent. (See Fig 41 ante, p. 93.)

independent evidence of the comparative dates of the two, or our circle will be a vicious one.

Fully to state and discuss this evidence would of course occupy far too much space, but a good portion of it has been already adduced in the notices of the buildings referred to. Only a word summarizing the evidence in each case can here be given, but the reader is assured that, if we put Bradford-on-Avon apart, and make a reservation in the case of the high walls of the nave at Monkwearmouth, none of the examples that are left present in their original work any feature that in the writer's judgment involves a later date than the seventh or eighth century.

The crypt at Hexham, and by implication that at Ripon also, is proved by contemporary evidence to be of Wilfrid's time, or about 675. Roman stones of the same kind as are employed in the Hexham crypt are also used at Escomb. The character of the work at Monkwearmouth proves it to be prior to the Danish ravage of 867 (ante, p. 148 f.), while at Jarrow the western end of what is now the chancel of the modernized church agrees in the form of its oldest openings with Monkwearmouth. Turning to the south, at Rochester we find in the position of the earliest remains and their relation to the later structures a strong presumption of the date, about 606, suggested for them. The buildings at Lyminge, Reculver, and Brixworth are on sites where we hear of monastic establishments of the seventh century.[1]

At the two former places the remains show nothing inconsistent with a corresponding date, while at Brixworth we have positive evidence of high antiquity (1) in the changes the building underwent in later Saxon times, (2) in the form of the original clearstory windows, which are of a type reminiscent of

[1] For Lyminge, c. 635, see Thos. of Elmham, *Hist. Mon. S. Aug. Cant.* Rolls Series, No. 8, p. 176. For Reculver, *A.S. Chronicle*, ad ann. 669; cf. Bede, *Hist. Eccl.* v, 8. For Brixworth, c. 680 Hugh White in Sparke, *Hist. Angl. Scr. Var.* Lond. 1727, II, 8.

Early Christian models (ante, p. 248). In the case of the Canterbury examples, the high antiquity of St. Martin as an ecclesiastical site is attested by Bede. The plan and technique of the oldest existing part would agree with a remote date, while the nave, which is clearly later, might well be pre-Danish. The tradition that St. Pancras was a very ancient church is not recorded at an earlier era than the fourteenth century (ante, p. 125), but the materials and technique of the building accord with the tradition, though the plan undoubtedly exhibits an advance beyond the simple Early Christian scheme.

So much for the independent evidence of the early date of this group of monuments, evidence that derives a substantial part of its value from the undoubted authenticity of Wilfrid's crypts at Ripon and Hexham. We must now turn to the question whether we can fix to a comparatively late date the special Saxon features which do not appear in this group but are elsewhere so common.

It is not necessary to add much in support of the opinion previously advanced (ante, p. 45 f.) that these features were introduced about the tenth century at the epoch when most of them were coming into general use in post-Carolingian Germany. The evidence in favour of this view seems so convincing that it is doubtful if in its general lines it will be seriously controverted. Will any one now maintain the theory that the Saxon pilaster-strips are copied from half-timber work, and not rather connected with the German Lisenen? Or that Saxon towers, more than eighty per cent. of which are western towers, are derived from Italy where the western tower is almost unknown? Or that the windows with mid-wall shafts were fetched by a long journey from Italy when we could have found them, and found them too in *western* towers, just across the North Sea? Are we to claim double-splayed windows as our native invention, or credit them to Italy or Gaul where they are hardly found, when we know they were in abundant use in post-Carolingian Austrasia, and were there employed

just as they are employed in England in constant association with the other features just reviewed? There have been already indicated some of the more striking signs of affinity, such as the top of the tower at Sompting (Fig. 90 ante, pp. 163, 200) and one of the caps in its openings (p. 202), and it may be further remarked that many of the cubical caps employed in our bell-towers of the 'Lincolnshire' type can be matched pretty exactly in the numerous Romanesque towers

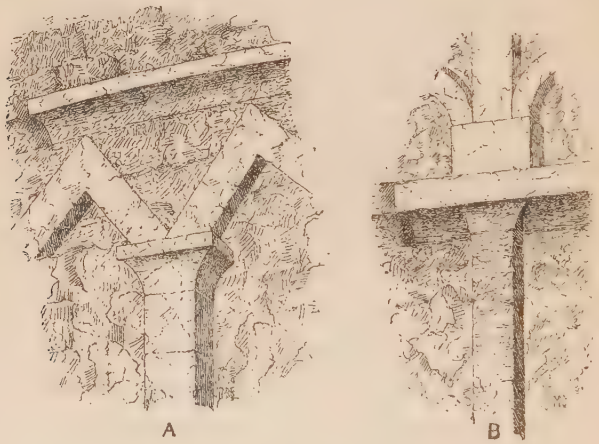


Fig. 163.—Pilaster strips and arcading.
A. At Gernrode. B. At Earls Barton.

of Germany. One of our most curious shapes, that in the western belfry opening at Glentworth, occurs at Gernrode and at Gelnhausen. The Scartho cap shown in Fig. 99, No. IX, is found, with the leaves rather more freely treated, in the oldest part of Werden a.d. Ruhr; the eastern cap at Glentworth, ibid. No. VIII, appears at the Schloss Kirche at Quedlinburg. The arcading round the apse at Wing (Fig. 157 ante, p. 260) is mated by that on the chancel at Fischbeck in Westphalia.[1] A comparison of A and B in Fig. 163 will show how like in character the Lisenen and arcading and string course on the

[1] Lübke, *die mittelalterliche Kunst in Westfalen*, Leipzig, 1853, Taf. III.

north-western turret at Gernrode are to similar features on our own tower at Earls Barton.[1] The question of comparative date and derivation may be passed over if we admit that our own use of the features and their employment on the other side of the German Ocean are parallel and, on the whole, belong to the same period.

In the case of those features for which Austrasia provides no prototypes, the long-and-short quoins and the strip-work round openings, we have the facts that while they are not in evidence in the early group, they occur commonly in connection with pilaster strips, double-splayed windows, and mid-wall shafts with which we must regard them as in the main contemporary. An additional word or two on these particular features may be advisable.

Though long-and-short quoins do not appear in the early group, yet the particular placing of stones involved occurs in openings, as at Escomb chancel arch and the western door of the porch at Monkwearmouth. When and through what stages the technique came to be applied to the quoining of walls we cannot at present determine, nor can we decide the relations in point of time between this system of making up corners and the employment in the same position of the large and massive quoin stones, as shown in Fig. 32 ante, p. 86. It is certain that these stones were in many cases Roman re-used, and where such blocks were available they would be employed at any epoch. There is no special evidence to fix the date of St. Mildred, Canterbury, which furnished the example in Fig. 32, but Dover and Norton, where stones of the kind are used, are shown by their plans to be late.

If long-and-short work appear to derive its origin from the early times, the other specially Saxon feature of strip-work round openings seems connected with the Austrasian feature

[1] See also the Frontispiece, which shows the straight-sided arches of the arcading. The same features appear on the nave wall at Geddington, Northants.

of the pilaster strip. It appears to be nothing more than the upright pilaster strip bent round the curve of the archivolt in the form of a hood mould, and if this be the case its chronology will depend on that of the simple pilaster strip from which it is derived. The pilasters flanking openings start from corbel stones in the same peculiar fashion as the wall pilaster strips at Earls Barton and Stanton Lacy, Shropshire. (Compare Fig. 48 ante, p. 97, with Fig. 104, p. 187.)

We thus obtain a useful line of demarcation between late and early Saxon buildings. Those in which appear the features just discussed are comparatively late; while absence of these features combined with positive indications of early date suffice for the attribution of an example to the pre-Danish epoch. If we test this by the other criteria mentioned at the outset we shall find it confirmed rather than shaken. The criterion of general appearance might be taken to imply that a building is to be put at an early date because it appears rude and primitive in workmanship or is small in scale, and conversely that elaborate or workmanlike structures or those of large size are to be placed correspondingly late. In the case of Saxon England however, as noticed in the preface, there was no such normal social development as is assumed in such an application of the criterion. Some of the golden times of Saxon England, when the best and most ambitious work might be looked for, came at an early epoch. The direct evidence of more or less datable monuments is also against the criterion, for Wilfrid's crypts and the porch at Monkwearmouth are well wrought and cunningly enriched, and the early Brixworth is one of the largest churches produced during the whole period.

The value of the criterion of proportion in ground plans may be judged from the evidence presented in the comparative chart, Fig. 30 ante, p. 84. If the reader will test the plans there given in outline by a rule placed diagonally from the right hand bottom corner common to all the plans, to the various upper corners on the left hand, he will see that

(Jarrow Old Church excluded) the most elongated plans are those of Heysham Chapel and Monkwearmouth, while the two widest are Wareham and Rochester. Escomb and Coln Rogers come next for narrowness, and St. Pancras and St. Martin, Canterbury (the nave only), for width. Now both Monkwearmouth and Rochester, though so different in proportions, are both early, while the early St. Pancras and St. Martin almost exactly correspond with the late Wareham and Deerhurst Chapel. Coln Rogers is just as certainly late as Escomb is early, yet they are in proportions almost the same. Hence though elongated proportions may be used to mark off Saxon examples from Norman, they cannot be relied on for aid in subdividing the Saxon period.

In the matter of proportions in elevation it has been already noticed (ante, p. 151) that height of walls is against an early date and suggests the Danish period, rather than the period of still unbroken Early Christian tradition.

The criterion of type of plan as distinct from that of proportions is of more value as an indication of relative chronology.

Of the types of plan noticed in the preceding survey (see ante, p. 100) some are simple and others complicated by the presence of towers or transepts. The simple plans include the plain rectangular oratory, the nave and chancel church, the apsidal oratory, the triapsidal, and the aisled or basilican scheme, and these may appear either early or late. The first, which we have found at an early date in Celtic lands, remains in use through the whole history of ecclesiastical architecture, and is this day a normal form for the private chapel of a mansion or institution. The example at Heysham (ante, p. 100 f.) may be comparatively early, and if we accept this it would involve an early date for the doorway at Somerford Keynes (ante, p. 102). The nave and chancel scheme, which in Ireland appears a natural development from the plain rectangle, may have been an Irish importation into Saxon England, though it must again be remarked that the Irish

examples of the type have no great appearance of antiquity. It is at any rate a form that would be certain to appear in any Christian region where the Roman tradition of the apsidal ending was not in force, and even in Romanized lands it can hardly be considered a rarity.[1] The absence of a tradition of vault construction would militate against the use of the apsidal plan, for this demands for its proper finish a semi-dome after the fashion that the French call a 'cul-de-four.' It is probable that the English backwardness in arch and vault construction (see ante, p. 127) has had as much to do with our national predilection for square-ended chancels as the 'Celtic tradition' which is often invoked to explain this insular peculiarity.

In any case, whether the rectangular presbytery be a natural growth or an importation from Ireland, it is no criterion of date or period as it occurs in the indubitably early Escomb and in the certainly late Repton and Boarhunt. The same may be said about the apsidal presbytery. The early Kentish group and Brixworth exhibit the apse, but so also do Worth and Wing, which are marked as late by their pilaster strips and mid-wall shafts. No chronological or geographical principle seems to be involved in the presence or absence of an apse. The ten examples enumerated in a note, ante, p. 118, are distributed pretty evenly over the country and are of various dates.

The statistical relations between the apsidal and square-ended presbyteries are not easy to fix. The eastern ends of the vast majority of Saxon churches have been altered, and the subject is complicated by the fact that Early Norman apses were sometimes substituted for older Saxon western walls. At Bosham, for example (see Fig. 173 postea, p. 328),

[1] In the Romanesque period, M. Enlart remarks, 'les petites et moyennes églises principalement en Picardie, Ile-de-France, Normandie, Champagne et Bourgogne, ont souvent un chevet rectangulaire' (*Manuel*, p. 223), while Dehio and von Bezold note the predilection for flat eastern ends in the Romanesque of the Upper Rhine and Swabia (*Kirchliche Baukunst*, 1, 208).

the middle third of the extensive chancel shows by the herring-bone work in the walling that it represents an Early Norman extension of the smaller Saxon chancel. The latter in all probability was square-ended but the Norman chancel seems to have had an apse. The apses that are said to have existed at Dunham Magna, Norfolk; and Corhampton, Hants, may be similarly explained. Taking the comparatively few Saxon churches of which the eastern termination is assured we can count a score of square ends,[1] to set against the ten apses already enumerated, but in all probability the square-ended chancels out-numbered the apsidal ones many times over.

The appearance of side aisles is no criterion of date, for, keeping only to existing monuments, we find basilican churches of the early period (Brixworth and Reculver), and also comparatively late (Wing, Buckinghamshire). It is however a significant fact that so many early churches of ample proportions, such as St. Pancras, Canterbury; and Rochester, are aisleless, whereas in the Romano-British period the narrower interior at Silchester was divided into nave and aisles (see the proportions compared in Fig. 30 ante, p. 84). The preference for the basilican form even for small churches is marked in North Africa as in all other centres of Early Christian art, whereas in Saxon England, though there only exist four aisled churches, there are nearly ninety about which we can be reasonably sure that in their original shape they were aisleless.

Passing now from the simple plans to those which exhibit transepts or towers, we start with the side chapels, 'porticus,' and western porches, 'porticus ingressus,' which appear at St. Pancras and elsewhere. About these it has been already

[1] i.e. Barton-on-Humber; Barrow; Boarhunt; Bradford-on-Avon; Breamore; North Burcombe; Coln Rogers; Daglingworth; Deerhurst Chapel; Dover; Escomb; Heysham Chapel; Kirk Hammerton; Repton; Sidbury; Tichborne; Wareham; Weybourn; Whitfield; Wittering.

noted that the former seem to be the beginning of the development of the cruciform plan (ante, pp. 129 f., 226 f.) while the latter in some cases at any rate are the forerunners of the western tower. The early date of the 'porticus' and 'porticus ingressus' are attested by their mention in Bede,[1] so that the appearance of these features, say at St. Pancras, need excite no suspicion of the early date of buildings containing them. The cruciform plan and the central or western tower are on the other hand distinct indications of a comparatively advanced date, and on this subject a word or two must be said.

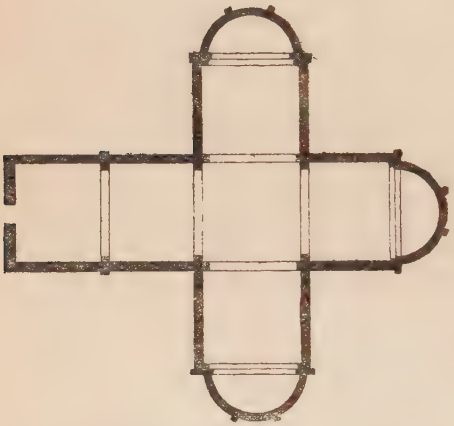


Fig. 164.—Plan of San Nazaro Grande, Milan, Greek Cross. (No scale.)

It will conduce to clearness if we glance first at the history of the cruciform plan and of the tower in European architecture generally.

(1) The reader's attention has already been called to the special form of the sepulchral church of which Constantine's Apostles church at Byzantium seems to have been the prototype. The scheme of this and of the churches formed upon its model was founded on the Greek cross with equal arms, but as a matter of practice the arm opposite the altar is often extended to somewhat greater length than the others.

Though Constantine's church has perished, an Apostles church 'ad modum crucis,' perhaps a copy of it, was erected at Milan at the close of the fourth century by St. Ambrose, and the plan of it has survived in the later Milanese structure of San Nazaro Grande (Fig. 164). The famous tomb of

[1] e.g. *H.E.* ii, 3, and *Historia Abbatum* c. 20.

Galla Placidia at Ravenna, of the fifth century, is an example on a smaller scale of the same form. Here too the western arm is the longest. The chapel in the archbishop's palace at Ravenna, ascribed to the fifth century, is an interesting early example of the plan used for a building that was not sepulchral in intent. In buildings of this type the most suitable feature to mark the crossing would be the dome or pavilion, and an

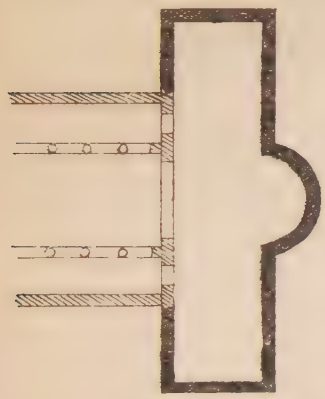


Fig. 165.—Plan of early Church of St. Denis, showing T form. (No scale.)

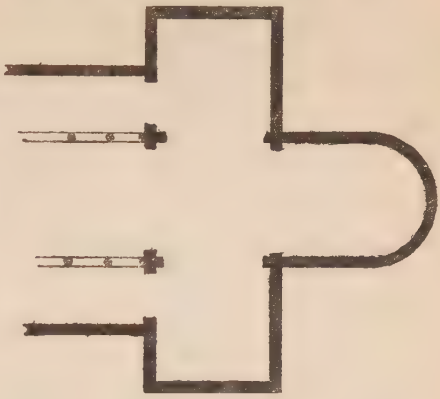


Fig. 166.—Altar end of Church on Plan of St. Gall, showing Latin Cross.

internal dome that externally takes the appearance of a square tower is used in the Ravennate building of Galla Placidia just mentioned.

(2) It was noticed ante, page 16, that an approach to the cruciform plan is made in some of the Early Christian basilicas of the city Rome. The same scheme, whether derived from Rome or independently developed, comes into use among the Merovingian Franks, who seem to have favoured T formed buildings in the shape of the crux commissa, or cross without a head.[1] Of this form, according to Viollet-le-Duc, was the original church of St. Denis, erected by Dagobert about 628 A.D. (Fig. 165).

[1] Enlart, *Manuel d'Archéologie Française*, I, 122, mentions several sixth century Gallic churches with transepts.

(3) The 'crux immissa,' or complete Latin cross, makes one of its first appearances in the middle ages in the scheme of the church on the Plan of St. Gall, dating about 820 (Fig. 166). Here the cruciform plan is not complete, but as it were in process of formation; while it is more pronounced at Hersfeld (Fig. 167), the plan of which seems to date from about the middle of the ninth century. Even then the scheme is confined to the eastern part of the Carolingian realm, for the searching investigations of Dehio and von Bezold in their *Kirchliche Baukunst des Abendlandes* have failed to find any example in Gaul or Italy earlier than the eleventh century,[1] when we come upon the pronounced example of the cathedral of Pisa, and from this time onward the cruciform plan becomes normal for the greater churches all over Europe.

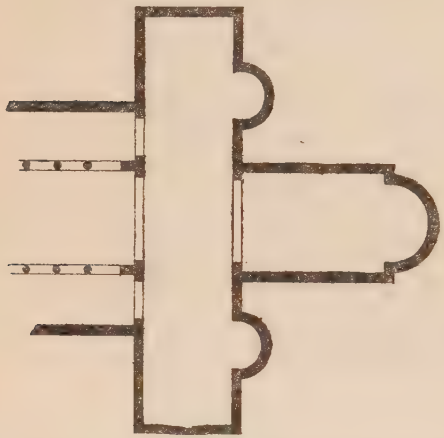


FIG. 167.—Plan of Hersfeld, of the ninth century. (No scale.)

It is clear that this development, though it may be connected with the Merovingian crux commissa, or to go further back with the transeptal Roman basilicas, is quite independent of the Greek-cross type of church. In the latter the four arms of the cross, the nave, transepts, and choir, are of the same width, height, and general importance, but in the buildings in the just-indicated line of development the relations between these different parts are at first quite irregular and accidental, and it is only later on that they are made to agree. For instance Hersfeld has its transepts narrower than its nave, but a little later, as at Würzburg, the dimensions have become the

[1] *Kirchl. Bauk.* I, 161.

same. The idea of the cruciform church was as it were flashed upon Europe at an early date in the complete and consistent plan of the Greek cross, but the idea was not taken up, and the real cruciform church of the Romanesque epoch was only arrived at independently after many experiments.

Turning to the question of the general history of the tower in Christian architecture, we find as already indicated that the early Greek-cross plans involved the feature of a central pavilion to mark the crossing, and that this pavilion took externally the form of a tower. The Gallic church of St. Martin at Tours built by Perpetuus about 470 A.D., and the Merovingian cathedral at Nantes described by Venantius Fortunatus showed this feature.[1] These pavilion-towers represent the earliest form of the tower in Christian architecture. We have seen already however that this early Greek-cross plan is not in the direct line of development which ultimately produced the Latin-cross plan of later mediaeval times, and the same may be said of the central pavilion, for this is not the same thing as the later central tower over the intersection of the arms of the Latin cross.

In Christian architecture generally the second form of the tower seems to be the detached tower, which appears at Ravenna and Rome a little later than the pavilion-tower, and at the same epoch (not later than the seventh century) the germ of the twin-towered façade appears in the fore-building flanked with stair-turrets at San Lorenzo, Milan; San Vitale, Ravenna, or in the East at Tourmanin in Central Syria. At the minster of Aachen of 796 A.D. the fore-building has already the form of a western tower flanked with turrets (ante, p. 51), while in the almost contemporary Plan of St. Gall, the flanking turrets are emancipated and stand as independent detached towers on each side of the entrance end of the building. The single western tower asserts itself, in Austrasia at any rate, at a somewhat later

[1] Enlart, *Manuel*, p. 122 f.

date, and Dehio and von Bezold consider that it is in general the latest form of the tower that Romanesque architecture produces.[1]

As a result of these general indications of date the following propositions may be regarded as established.

1. A Greek-cross plan with central pavilion-tower might belong to the earliest Saxon period.

2. A crux commissa plan, with the clear transverse space across the transepts, might be equally early.

3. It does not follow that the Latin-cross plan familiar in later times goes back to an early date, as this seems to be the outcome of an independent course of development.

4. The central towers of the Latin-cross churches, and the axial and western towers generally, need not be placed early because of the early appearance of the pavilion-tower.

In our own country, as in Europe generally, we find early examples both of the Greek-cross and T plans, for at the beginning of the eighth century Wilfrid erected at Hexham a church on the former plan with a central pavilion-tower (see postea, p. 319) and the T shaped scheme of Peterborough (postea, p. 315) may be of the same epoch, but these facts do not carry with them early dates for our cruciform churches and towers generally.

No pavilion-towers or detached turrets have come down to us from Saxon times, but there are a dozen axial and central towers and nearly eighty western ones. Viewed in themselves, without reference to the details they exhibit but in relation merely to the general place of the tower in architectural development, they would all have to be placed in post-Carolingian times, and could not be dated earlier than the ninth or tenth centuries. Most of these towers however as we have already seen, like the cruciform churches, possess the characteristic details which indicate an advanced period,

[1] Die jüngste Erscheinung erst ist der Einzelturm an der Westfassade. *Kirchl. Bauk.* 1, 561.

and these details enforce the other indications of date just given. The fact that the use of the double belfry opening, so characteristic of Saxon towers, is carried on into post-Conquest times (Hornby, Yorkshire; Boothby Pagnell, Lincolnshire) is another proof of the comparative lateness alike of the tower and of these special features.

By the aid of these indications of date we may now be able to distribute most of the existing monuments among the three periods already indicated (ante, p. 35).

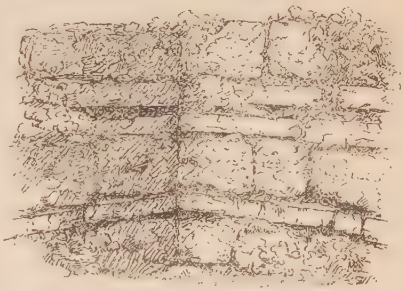


Fig. 168.—Masonry of Roman character at Stone-by-Faversham, Kent.

Out of the dozen monuments mentioned on page 273 we have for reasons already given (ante, p. 73) to reject Bradford-on-Avon, though we accept Peterborough, and we may ask whether there are any other churches beside the last named that we shall be justified in including in the early list. One such we find at Corbridge (ante, p. 151) where the great portal, the Roman stones, the western porch, the internally-splayed lights, agreeing as they do with Escomb and Monkwearmouth, place the building in the pre-Danish period.

Stone-by-Faversham,[1] which has not been mentioned in the previous chapters, gives us an example of technique that is perhaps more in the antique style than any other piece of work in the country. The ruins, consisting only in the lower courses of the walls, lie in a field a few hundred yards north of the main road from Faversham to Sittingbourne a little beyond Ospringe, and are worthy a visit, if only for the fact that the chancel, a mediaeval extension of the Saxon presbytery, still keeps at its eastern end the massif of the old stone altar. The

[1] See *Archaeologia Cantiana*, ix, lxxvii.

oldest parts are the western ends of the chancel walls and on the south the adjacent quoin of the nave. A bit of the masonry in the angle between the chancel wall and the east wall of the nave on the south is shown in Fig. 168. It is composed of squared blocks of tufa and Kentish rag, of the type of those used in continental petit appareil, alternating in classical fashion with Roman tiles. There is no difficulty in accepting this as of early date.

Britford has often been claimed as early, and the use of Roman bricks with the curious mortising of jamb and impost in the south opening (ante, p. 229) give colour to the pretension. The plan, with eastern transeptal chapels, is however late, and a comparatively advanced date seems forced upon us by the stripwork, the presence of which round the openings is indicated by traces that are unmistakable. No other example seems to offer any positive evidence of early date, that is of the first period c. 600-800 A.D., though there are at the same time about a score of others which have no late indications, and may possibly belong, if not to the early period, yet to the intermediate or Danish epoch (800-950) from the commencement of the invasions to the time of Edgar. Of these the most interesting, because best preserved, examples are Avebury, Wilts (ante, p. 172); Bishopstone, Sussex (p. 131); St. Mildred, Canterbury (p. 86); Heysham Chapel (p. 100); Sockburn, Durham; St. Michael, St. Albans;[1] Bardsey, Yorks (p. 156); Lydd, Kent (p. 245). The rest are more fragmentary.[2]

On the other hand the late indications already discussed, whether in the form of characteristic Austrasian details or of advanced features of plan and elevation, enable us to group together about one hundred and thirty churches as belonging to the later period, or from about 950 to the Conquest. Double-

[1] St. Michael was originally built by Abbot Ulsinus probably about 950. See *Gesta Abbatum Mon. S. Albani*, Rolls Series, No. 28/5, p. 22.

[2] They comprise Hart, Durham; Hackness, Yorks; Oxford Cathedral; Somerford Keynes, Wilts; Stoke d'Abernon, Surrey; Wroxeter, Salop.

splayed windows, pilaster strips, and mid-wall shafts account for about ninety examples, while most of the others exhibit a treatment of ground plans, of openings, or of details that are of distinctly Romanesque character.

It need not be assumed that the western tower is in itself an infallible sign of the latest of the three periods. By far the greater number of the existing towers are doubtless subsequent to 950, but some may be earlier, and among these the tower at Deerhurst is one whose chronological position will have to be carefully studied.

About another score of the monuments present as their sole indication of pre-Conquest date the characteristic Saxon long-and-short work in the quoins. This we have found to be native in origin and evolved from the upright and flat slabs used in early archways as at Escomb and Monkwearmouth. How soon it made its appearance we cannot tell, but it does not occur in the early group. On the other hand we find it used frequently in conjunction with features that are acknowledged to be late, and it must be regarded as a sign of either the midmost or the latest of the three periods of Saxon architecture.

To sum up the above, we can place some fourteen or fifteen[1] examples in the first period, and one hundred and thirty in the third, which will leave some fifteen that may be provisionally located in the intermediate period, while the long-and-short work of the rest puts them either in this period or the third. In the enumeration of monuments given in the index list of Saxon churches at the end of the volume, the letters A, B, C, as signifying the periods, are appended to the names in the list, and convey a more definite indication of the writer's opinion in the case of individual examples. This opinion it must be understood is in many cases only given provisionally and under reservations explained in the note postea, p. 331 f.

[1] Fifteen, if we include St. Peter-on-the-Wall, the difficulties connected with which were indicated ante, p. 116.

The internal chronology of the third architectural period is not easy to treat. The monuments which belong to it are as a whole marked off by the signs we have come to know from those of the earlier periods, but among the acknowledged members of the group there seem at present only imperfect means for distinguishing early, middle, and late. These three sub-periods, C^1, C^2, C^3, correspond respectively to the epoch of revival in the latter part of the tenth century ; to that of church restoration under Cnut at the close of the Danish wars in the early part of the eleventh century ; and finally to that of the church extension which seems to have gone on actively in the time of Edward the Confessor. The question is how the work of these different epochs is to be distinguished.

As a starting point we may take the fairly dateable Barton-on-Humber (ante, p. 208 f.). It exhibits pre-Conquest work of two dates, so that the earlier, comprising the whole Saxon fabric save the uppermost story of the tower, may be provisionally placed in the first sub-period. An examination of the building seems to favour this date. We find here most of the characteristic late features in fully developed forms, but we note the retention of the earlier baluster shafts. As there is a continental prototype for the plan dating about 900 A.D., we may reasonably ascribe the work to the latter part of the tenth century. This ascription carries with it a suggestion of an equally early date for the two other towers enriched with pilaster strips and carving, at Earls Barton and Barnack. The builder of the first of these employed the banded baluster shafts of old tradition (Fig. 115, ante, p. 199) and divided his belfry openings in an abnormal fashion (ante, p. 189), though on a scheme different from that used at Deerhurst (postea, p. 300). The elaborate enrichment at Barnack has nothing about it that is necessarily late. These three towers are so different from the plain unpretending structures of the ' Lincolnshire ' type, with their characteristic mid-wall shafts, that we are naturally disposed to locate them in distinct epochs, and as the 'Lincolnshire' towers, which over-

lap into the Norman period, are mostly of the last sub-period, we have an additional reason for putting the exceptional towers correspondingly early.[1]

It must be observed that, however elaborate be the work on the exteriors or in the tower arches of these exceptional structures, we do not observe either angle and soffit shafts, or developed roll mouldings such as are common in the advanced Romanesque of every land. The appearance of these Romanesque features we may regard as betokening a date near the middle of the eleventh century, while when they are absent the work may be carried back to the end of the tenth. The tower arches at Barnack and Cambridge have moulded imposts, pilaster strips carried round as hood moulds, and in the latter case sculptured animals, but the arches are in both cases cut straight through the walls and there is no recessing or membering of the arch, such as we find at Wittering (Fig. 59, ante, p. 108) Sompting (Fig. 118, ante, p. 201) or Bosham (Fig. 174, postea, p. 329). Similarly, the tower, formerly chancel, arch at Barton-on-Humber is plainly cut (Fig. 130, ante, p. 215), while that at Broughton is recessed and supplied with angle and soffit shafts (Fig. 128). This indicates a distinction of period between the buildings though they are so alike in plan.

So far as features and details are concerned, these criteria of the retention of balusters on the one hand, and on the other the use of angle or soffit shafts and recessing seem the only one available for separating the monuments of the Edgar period from those of Edward the Confessor's day. Additional investigation

[1] Besides the conspicuous examples like Earls Barton and Barnack there are other towers in different parts of the country that do not exhibit the characteristic belfry openings (though in some cases they may have formerly possessed them) and some of these may be early in the third period. The following are some examples :—Bedford (St. Peter); Brigstock; Caversfield; Guildford; Hough-on-the-Hill; Skipwith; Stevington; Swanscombe.

St. Benet, Cambridge, retains the baluster shafts in belfry openings.

in the future may enable the chronology of this last main period to be more accurately fixed, but for the moment the subject cannot be carried further, and this tentative chronological survey may conclude with a list (1) of a few monuments of importance that are brought by their pilaster strips or double-splayed lights within the compass of this period, but at the same time show no features incompatible with the earlier part of it; and (2) a list of these buildings marked as specially late by the criterion just noticed.

(1) Some examples that may belong to the early part of the third period :—

Arlington, Sussex; Bradford-on-Avon; Breamore, Hants; Brigstock, Northamptonshire; Britford, Wilts; Corhampton, Hants; St. Mary, Dover Castle; Repton; Stanton Lacy, Shropshire; Stow, Lincolnshire (lower part of transepts); Whitfield, Kent; Wing, Bucks.

A brief note on Stow may be permitted.[1] To the place is attached a lordly tradition of early origin and episcopal rank, but we really know nothing about it till near the year 1040, when the then bishop of Dorchester, with the bountiful aid of Leofric and Godiva, set up there a religious establishment apparently of secular canons. We also hear of it about fifty years later, when Remigius the Norman bishop of Lincoln states in a charter that he has decided to renovate the place which was in a state of decay through the lapse of time and the neglect of those in charge.[2] The present nave is generally reputed to be his work, while the fine vaulted chancel[3] is attributed to bishop Alexander in the first half of the twelfth century. The Saxon work is confined to the transepts and the remains of the central tower with its arches, and as

[1] Cf. Rev. G. Atkinson, on Stow Church, in *Ass. Soc. Reports*, II, 315, and *Gentleman's Magazine*, 1863/1, 755. Also Dugdale, *Mon.* III, s.v. Eynsham.

[2] Ecclesiam . . . in loco qui vulgo dicitur Stowa, quondam prolixo temporis spatio praesidentium incuriâ desolatam, reformare decerno. Dugdale, *Mon.* III, 14.

[3] The present vault is a reconstruction.

regards the dates of the different parts of this work, it is clear that the moulded archivolt of the tower arch from the nave cannot be earlier than the date c. 1040, and might be later. The piers of the arch may be earlier than 1040, but, from their pilasters, must be of the third period. The transepts however, in their lower portions, have been claimed as relics of a much earlier church, and so far as their plan is concerned they might conceivably be the relics of a crux commissa church like Peterborough. The internal length of the transepts is 82 ft. as against the 92 ft. at Peterborough. Unfortunately however for this attractive theory, the transepts rest upon a somewhat advanced plinth of two chamfered orders, an indication of date that cannot be ignored. As noticed above, ante, p. 273, none of the buildings of the first period have plinths, while on the other hand these are common in the late western towers and churches of the last sub-period (see Fig. 31, ante, p. 85). Either then the transepts are late tenth century and the tower arch c. 1040, or the transepts are c. 1040 and the tower arch Early Norman.

(2) Some late examples with angle shafts, etc., advanced mouldings, or recessed arches :—

Bosham, Sussex ; Broughton ; Carlton-in-Lindrick, Notts ; Clayton, Sussex ; Kirk Hammerton and Kirkdale, Yorks ; Norton, Durham ; Sompting, St. Botolph, and Stopham, Sussex ; Stow (archivolt of tower arch) ; Wareham ; Wittering.

On the basis of this chronological survey we may now attempt a brief historical sketch, which may serve as a summary of previous discussions.

It has been already seen that though there are monumental links between the Early Saxon building period and that of Romano-British times (Vol. I, Ch. VII, ad init.), the strictly architectural connection is slight. There is no evidence that any existing Saxon church was once part of a pagan Roman building (ante, p. 125). In each of the cases where this has

been suggested, form and orientation betoken an ecclesiastical origin. Whether or not any part of a Romano-British church survive in an existing Saxon one is another question. Silchester has come down to us, and we have seen some reason to believe that the fabric of Augustine's cathedral at Canterbury, enlarged in the tenth century to be destroyed in the eleventh, was Romano-British (ante, p. 261). We have every reason to credit the assertion of Bede that the original church of St. Martin at Canterbury was the work of Roman believers.[1] There is a parallel to it at the other end of Britain, in Ninian's church of St. Martin at Whiterne in Galloway of about the year 400 (Vol. I, p. 161), and the two Martin churches are links in the chain of evidence that connects the Church in Roman Britain rather with Gaul than Italy. The present chancel may as we have seen contain some of the earlier work, but the fragment is not, like the cathedral and Silchester, basilican.

This fact that Silchester was basilican, while Rochester and St. Pancras consisted in single naves (ante, p. 119 f.), is the first significant phenomenon in the history of Saxon architecture. The width necessitated either a correspondingly spacious arch of triumph, or an arcade, and the choice at St. Pancras, Rochester, Lyminge, and other places, of the latter is another noteworthy appearance. The introduction at the first named church, and perhaps at the cathedral (ante, p. 262), of projecting lateral chapels is a third point, and the occurrence at St. Pancras, Monkwearmouth, and Corbridge, with perhaps other examples, of western porches is a fourth. For none of these characteristics or features can we readily find prototypes on the Continent. The want of surviving early churches in Gaul may be the reason of this, but the literary notices we have of Gallo-Roman and early Merovingian churches do not suggest to us

[1] *H.E.* i, 26. The words are worth quoting as they are sometimes misinterpreted, 'erat autem prope ipsam civitatem ad orientem ecclesia in honorem sancti Martini antiquitus facta, dum adhuc Romani Brittaniam incolerent.'

buildings with the characteristics of these Early Saxon examples. North Africa and Italy are no more helpful than Gaul, and Saxon architecture seems to start from the first on lines of considerable originality. The baluster shafts in the north (Fig. 82, ante, p. 145) are equally sui generis, or at any rate there are no Gallic prototypes. The fact that the earliest work at Monkwearmouth is so unlike what Gallic workmen would have wrought, is one argument for placing it rather later than the actual time of Benedict Biscop.

For another phenomenon of the earliest group of churches it is easier to find continental parallels. This is the presbyterial space screened off before the apse which is so marked an internal feature at Brixworth (Fig. 150, ante, p. 249). In a rudimentary form we find this in the 'stilting' of the apse in most of the early churches, e.g. St. Pancras and Reculver, which have this termination. This is only what occurs with some frequency in Early Christian churches outside Italy, as in North Africa and Syria, and calls for no special remark. The Brixworth arrangement is not, to the writer's knowledge, found elsewhere, though the transept of the basilicas of the city Rome has been brought into comparison with it. Screens formed of arcading are however used to cut off spaces at the altar end of interiors in not a few early churches, especially in Spain.[1] Among churches that exhibit this feature the nearest parallel to Brixworth appears to be the instructive Carolingian basilica at Michelstadt (Steinbach) in the Odenwald, built by Eginhard about 825 A.D. The interior of this now desecrated building preserves clear traces of a cross wall about 12 ft. high, which with openings in the centre, formed a screen that cut off a space of about 16 ft. from the eastern end of the nave.[2] At Brixworth the wall rises to the roof and makes the division more marked, but it was probably due to the same reason which operated at the later date at Michelstadt.

[1] Dehio u. von Bezold, 1, 98, enumerate some examples.

[2] Adamy, *Die Einhard-Basilika zu Steinbach im Odenwalde*, Hannover, 1885.

Like so many of the Saxon churches of the first generation, Brixworth was monastic, but was at the same time a missionary church to which the surrounding population had to be conducted or allured. Michelstadt evidently had the same intention.[1] The part of the interior cut off at the altar end would serve as the monks' church, the general congregation occupying the nave.

The plans of the earliest Saxon churches were as we have seen partly apsidal and partly square-ended, the latter probably preponderating. As in their plans, so too in their technical aspects, Saxon churches exhibit a mingling of the two traditions that were noticed in the opening chapters as operative in our pre-Conquest building. Saxon masonry, commonly of irregular rubble-work, was compacted in walls as a rule of remarkable thinness. These thin rubble walls are of the same character as the partition walls in Roman villas and stations, which in early Saxon times were sufficiently abundant to supply models in almost every part where these were needed. Roman squared stones were used wherever available for quoins and special features, and it was probably his familiarity with these that gave the Saxon builder that penchant for the megalithic which never left him. Celtic tradition on the other hand, if not solely responsible for the normal nave and chancel plan, makes itself apparent in the curious feature of sloping jambs to door and window openings. The phenomenon is by no means universal, but it appears from time to time through the whole course of Saxon architectural history. It is very pronounced at the early Escomb (ante, pp. 114, 115) but is to be observed also in the aperture of the late chancel window at Boarhunt (ante, p. 105) as well as in that at West Hampnett, Sussex; also in openings in the fine church which cannot be an early one at Brigstock in Northamptonshire (Fig. 43, ante, p. 94).

[1] Adamy, loc. cit. p. 6.

With materials and technique that are for the most part Roman, but exhibit some Celtic peculiarities, the Saxon builder of the seventh and eighth centuries constructed the monastic and village churches the number and distribution of which have been already indicated (ante, p. 75 f. and map, Fig. 175). A certain originality in planning as well as in technique and ornament has been claimed for them from the first, and it is probable that the churches of the seventh century were fully as ambitious and well executed as those nearer to the time of the Danish inroads. There is to be noticed about many of the former a certain amplitude, which suits a time of ease, and which is marked alike in general proportions (Rochester, Brixworth), and in openings (St. Pancras, Corbridge). The characteristic narrow Saxon doorway, which we find at Bradford-on-Avon or at Worth (lateral doors), is rather late than early. The internally-splayed high and narrow loops as at West Hampnett, Sussex, are also late.

So soon however as the disastrous and terrifying Danish inroads had become the predominant feature of the times the art of building must have received a check, for though a church ruined by a Viking raid would as a general rule be rebuilt, yet as such raids were often repeated there was no encouragement for display or elaboration in any new or renovated fabric. Notwithstanding this, the art of building during the second or Danish period was certainly not at a standstill, for the development of the special Saxon peculiarity of the long-and-short quoin must fall within this time. It derives its origin, it will be remembered, from some of the earliest work, and it is in normal use in the latest period, so that its evolution must fall in the intermediate epoch. It is not easy however to identify long-and-short quoins, so to say, in the making, for this special arrangement of pieces may occur accidentally in quoins that are not intended to be of this particular character. A more minute examination of our Saxon buildings may reveal evidence

of the gradual formation of their characteristic features, but such 'transitional' forms are at present difficult to identify. The quoin shown in Fig. 32, ante, p. 86, may be regarded by some as transitional, and the quoins at Sockburn, Durham, when compared with Escomb carry the same suggestion.[1]

Before the beginning of the intermediate or Danish period there was already established that connection between England and Germany the importance of which in the domain of the arts has already been noticed. This continued through the intermediate period, and it is during this that we should naturally look for the traces of kinship between Saxon and Austrasian architecture. The special features, on which the suggestion of this kinship is founded, do not however come into vogue in Germany before about the tenth century, and we are inclined to regard their introduction into English work as due to the marked activity in church building and restoration that signalized the reign of Edgar (959-975 A.D.). There has been already quoted a significant remark relating to the abbey church at Ramsey of c. 970 (ante, p. 242). It is said of it that 'compared with the old fashioned method of building which had before prevailed, it was a structure of no mean pretension,' and we see proof here of the awakened ambitions of the age. The most intelligible theory of the architecture of this epoch seems to be that when the new activity began the English builders of the time found themselves rather at a loss for features which should give an architectural character to their fabrics, and were glad to adopt the pilaster strips of their neighbours across the North Sea. The substitution of the double-splayed lights for the internally-splayed ones which were universal in the earliest epoch and appear e.g. at Avebury, and at St. Michael, St. Albans, of about 950, must have been due to the force of the new influence, which we regard here as making itself felt all at once at this epoch of

[1] *The Reliquary*, April, 1894.

revival, rather than as slowly filtering in through a long period of years.

Whether or not the western tower itself, with its equipment of double belfry openings, made its appearance in the same comparatively sudden fashion is a question on which a word must be said. There are here certain considerations on which it is worth while for a moment to dwell. The western tower in Saxon England is in some cases connected with the western porch, and this last is an early feature. The western tower is moreover associated with subsidiary structures which have left their traces at Brixworth, Corbridge, Netheravon, and other sites; while at Brixworth and Deerhurst it has chambers within it evidently destined for some purpose of honour. That is to say the Saxon western tower has about it features which give it a special position and interest, and oblige us to consider it as an independent creation. Now there is one exceptional tower, devoid of any of the later features, that may well be earlier than Edgar's time, and that is attached to a church which also presents no details of acknowledged lateness. The reference is to Deerhurst, the scheme of the eastern part of which was given in Fig. 140, ante, p. 231.

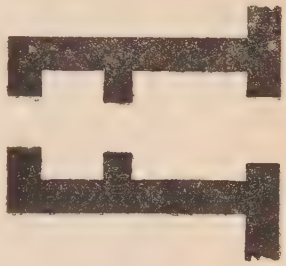


Fig. 169.—Plan of western tower at Deerhurst.

The western tower at Deerhurst, of which Fig. 169 shows the plan, is unique in that it is divided into two by a partition wall that runs up to about a third of its present height of 71 ft. Externally it is perfectly plain without string course or set off. The belfry openings with practically the whole of the upper part of the tower are of later date. The internal arrangements were noticed on page 171 f., and it will be remembered that the chamber containing the aumbry-like recesses in the middle third of the

tower opens towards the nave by a double aperture. The form and details of this are of much significance and are shown in Fig. 170. It must be noted that the pier which divides the aperture runs through the whole thickness of the wall and is not a mid-wall shaft. Furthermore it is enriched with flutings, that are alternately in their upper or lower halves filled in with convex members in the fashion called 'cabling,' while all the details are cut with classic decision.

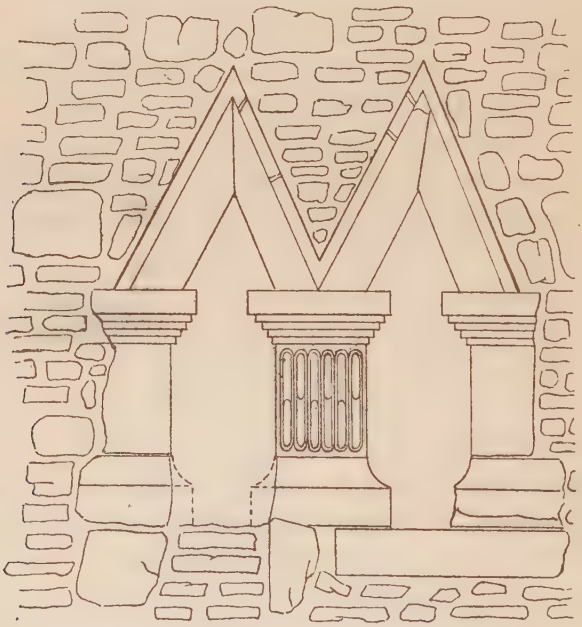


Fig. 170.—Double aperture in eastern face of Deerhurst tower, western side.

No such treatment of double openings and no enrichment of the same pattern occurs elsewhere in our Saxon work.[1] We may indeed single out the feature in question as the only one in any Saxon building that can be distinctly fixed as transitional between the first and the third of our periods. We find certain forms in evidence in the earliest groups and others in vogue in the latest period, but we have just

[1] The reeded pilasters at Bradford-on-Avon are much coarser attempts.

seen how hard it is to find any link of connection between the two sets. This case of the subdivision of an opening by means that are not yet those of the normal mid-wall shaft and through-stone, is accordingly of especial significance for the chronology of Saxon work. A case not wholly unlike at Earls Barton has been noticed ante, p. 189 f. In another connection the character of the detail has equal significance. Carolingian art supplies us here with somewhat close parallels. On the western face of the northern half-round flanking turret of the western forebuilding at Aachen occurs a small opening, divided by a square fluted pilaster, that can be distinguished in Fig. 20, ante, p. 51. Similar pilasters, that are modern restorations, divide openings in Carolingian walling that abuts on the north western corner of the minster, and fluting of the same classical pattern occurs elsewhere in Carolingian work. Some capitals from the palace of that period at Ingelheim, in the Museum at Mainz, show it, and so do certain imposts in the church at Höchst on the Main, placed by Essenwein in the ninth century.[1] The 'Vorhalle' at Lorsch in its upper stage (Fig. 22, ante, p. 59) also furnishes an instructive parallel.

It is not necessary to suppose Deerhurst Carolingian, but the presence of these early details, and the absence both from tower and church of the recognizable marks of the later period, seem to claim for it a place apart. Let us therefore test this hypothesis of a date in the intermediate or Danish period by examining the church as a whole and by a comparison with other buildings that are possibly of the same age.

Deerhurst was a monastery.[2] The exact date of its foundation is not known but it was in existence during the Danish

[1] *Handbuch der Architectur*, die Baustile, III, p. 139.

[2] For the history and description of Deerhurst see the excellent monograph by the Rev. G. Butterworth, *Deerhurst, a Parish of the Vale of Gloucester*, Tewkesbury, William North, 1890.

period. The arrangements of the eastern end of the church would concern the inmates of the monastery, the buildings of which, at any rate in later mediaeval times, adjoined the south-eastern part of the edifice. Over the transeptal chapels seen on the plan, Fig. 140, ante, p. 231, there were upper chambers that opened towards the choir by wide arches. These apertures with the various doorways on the ground floor, which have square, triangular or round heads, are treated with great simplicity. There are no flanking pilasters but the imposts in some cases have a hollow chamfer. The most advanced feature, one that occurs also in the tower, is the square sectioned hood mould which we find over the wide arch leading towards the apse. This, like hood moulds on the tower, springs from projecting corbels in the shape of animals' heads. Such carved grotesques suggest a Scandinavian influence that might easily have been exercised in this period, and this suggestion is borne out by the appearance at a later date of similar sculptured heads on the Norman church of Kilpeck in Herefordshire, in proximity to ornamental pilasters carved with intertwined serpents of a pronounced Scandinavian type. Save for the hood moulds which introduce an element of doubt, there seems nothing in the forms or details at Deerhurst incompatible with an attribution to the early part of the tenth century, while the narrow doors to the transeptal chapels on the ground story are also early. The projecting half-rounds on the jambs of the arch before the apse are not ordinary soffit shafts, and the arch above them is not recessed or furnished with a soffit roll.

The arrangements of the western end suggest a comparison with Brixworth. The apartment there with the triple window on the first floor of the tower is a parallel to the apartment with the double opening at Deerhurst. Just as at Brixworth access is provided to this by the turret stair, so at the latter place the doorway in the western face of the tower on the level of the aforesaid apartment (ante, p. 174) may have been gained from outside by some convenient arrangement for ascent.

Who made use of these apartments? There is a treatise by the Carolingian statesman Eginhard, in which he tells of certain miracles wrought in the basilica he had erected about 830 at Seligenstadt, then Mühlheim, on the Main. In the upper story of the western choir he possessed what he calls a 'coenaculum' or upper chamber in which was an altar and which he used for his own accommodation during the services.[1] When we reflect on the position assumed towards the churches of the later Saxon period by the great men of their localities (see Vol. I, p. 324 f.) we may picture to ourselves the local landowner at Deerhurst or Brixworth following the example of the Carolingian statesman and establishing himself in a coenaculum at the western end of the local oratory, after the fashion of an English lord or squire of much more recent days. Brixworth was at first monastic and Deerhurst was monastic to the end, but a small monastery often depended on the local lord, and in any case the western end of its church was generally for the use of the lay population. Brixworth may have been restored by the ealderman of the place even prior to the time of Edgar. The Saxon work of the restoration shows none of the often-noticed later features, and the balusters in the opening have behind them an old Saxon tradition (Fig. 114, ante, p. 198).

This suggestion of the use of these upper chambers by some local magnate cannot be dissociated from the question of the purposes of the various western chambers and adjuncts connected on the ground story with towers, of which the monuments have given us evidence. In many cases no doubt these were set apart for the administration of baptism, and that they were also used for burial we can gather from what Bede tells us of the porticus ingressus at Monkwearmouth[2] as well as from the story about the sepulchre of Swithun at Winchester.[3]

[1] Migne, *Pat. Curs. Compl.* CIV, pp. 559, 565, 593.

[2] *Historia Abbatum*, c. 20.

[3] 'Winchester' Volume of the Archaeological Institute, p. 6.

We can however do little here but conjecture. The existence of these various adjuncts and coenacula gives an importance to western ends of Saxon churches which bears out the theory of their connection with the Austrasian 'Westwerke' rather than with simpler frontal towers of defence such as we have seen existing in parts of France. Taken by itself Deerhurst tower might suggest a structure of this latter kind, and the site of the monastery near the Severn, whose waters were so often ploughed by Viking keels, would make this a plausible theory of its origin and character. Viewed as a whole, however, Saxon towers look much more like the open, freely-used, German forebuildings than like closed towers of defence. Deerhurst had a western doorway and about half of the other Saxon towers possess this feature, while all, save Leathly, ante, p. 166, open to the church through an ample tower arch.

Deerhurst and perhaps Brixworth may accordingly be regarded as introducing into our architecture the western tower, and their towers may even be claimed as some of the earliest of existing specimens in Europe generally, preceding in point of time the numerous western towers of the Rhineland and Westphalia. In relation to the cruciform plan also Deerhurst may mark an epoch, for the transeptal chapels, as we find them here with their two stories, are bold features that would tell in the external view, though internally they only open towards the central space through narrow doorways.

The third period opening with the reign of Edgar claims by far the greatest number of the extant monuments, and this fact gives it a proportionate importance. The same nave and chancel plan which we find at the earliest epoch remains in common use to the end of the whole Saxon period, and is then taken over as an inheritance by the Norman and the later mediaeval builders. This normal scheme is however very commonly extended by the addition of a western tower, which is established in this period as a substantial feature of English

church architecture; while axial towers in various positions, towers forming the body of a church, twin-towered façades, and central towers connected with the cruciform plan or at times combined with western towers, supply interesting material to the student of architectural evolution. Side by side with these square-ended single-aisled churches, the period gives us at Wing one developed basilican plan with a polygonal apse and this may probably be regarded as for this country the expiring effort of Early Christian art.

There can be no attempt here at any detailed analysis, from the historical side, of the copious material offered by this ultimate period. All that can be done is to glance at the principal groups and types from the standpoint of the scheme of chronology offered a few pages back.

The fact that as a group the 'Lincolnshire' towers must almost necessarily be very late has an obvious bearing on the suggestion that they had a defensive character. It has been noticed already (ante, p. 166) that there is nothing about the towers themselves to indicate such a character, but to many people their occurrence in such numbers in regions that were specially exposed to Danish visitations will seem hardly fortuitous. Ecclesiastical towers were certainly used in other lands for purposes of defence and refuge. The Irish round towers are the most conspicuous instance, but many of the single frontal towers in France and even some in Germany were of this kind.[1] In our own country near the Scottish march there are church towers which served a quasi-military purpose in Border warfare. In the case of the Irish round towers, it is possible that those which actually remain are not the earliest which were built, but that ruder structures of the same kind preceded them. So too it is conceivable that the 'Lincolnshire' towers of the eleventh century represent a type evolved somewhat earlier when Danish hostility was a still present danger. It has just been admitted that defence or

[1] Dehio, *Kirchliche Baukunst*, I, 586. Enlart, *Manuel*, p. 249.

refuge may have had something to do with the planning of Deerhurst tower, and it has seemed best to indicate this theory in the case of the 'Lincolnshire' group, though in the view of the writer the theory in question has no grounds, beyond a certain general likelihood, for its support.

The tower in its other aspects as axial and central has been ascribed to this period, and the full development of the cruciform plan waited too for the same epoch. At Deerhurst, where the transepts first seem to assert themselves on the exterior, there is no evidence of a central tower, and Barton-on-Humber may claim to be the earliest tower of the kind. The continental plan most like that of Barton, at Werden a.d. Ruhr, seems to have consisted in a square central tower about 30 feet on a side, in interior measurement, with aisles to west, north and south, the east side being joined on to an earlier church.[1] The arrangement is that of a 'central' church and may have been suggested by the Early Christian Greek-cross plan with central pavilion-tower. Similarly Barton-on-Humber may really rest on a like tradition. There is no reason to suppose it copied directly from Werden, or any similar continental example, though it is of interest to know that schemes of the sort were in use in the region with which the designer of Barton is most likely to have been in touch. The Greek cross plan existed already at Hexham, and Barton may be in indirect fashion affiliated thereto. At Barton the tower, it will be noted, has full independence, and it is possible that this scheme came ultimately to influence the designers of the completely cruciform churches, such as Norton and Stow, in which the tower has the same distinct individuality apart from the nave and the other members that abut against it.

Wilfrid's church would then have established the principle of the central tower, and Barton have expressed the same idea in the language of nascent Romanesque, while Stow and Norton perfected the scheme in connection with the Latin

[1] Effmann, *Die Karol.-Otton. Bauten zu Werden*, p. 168.

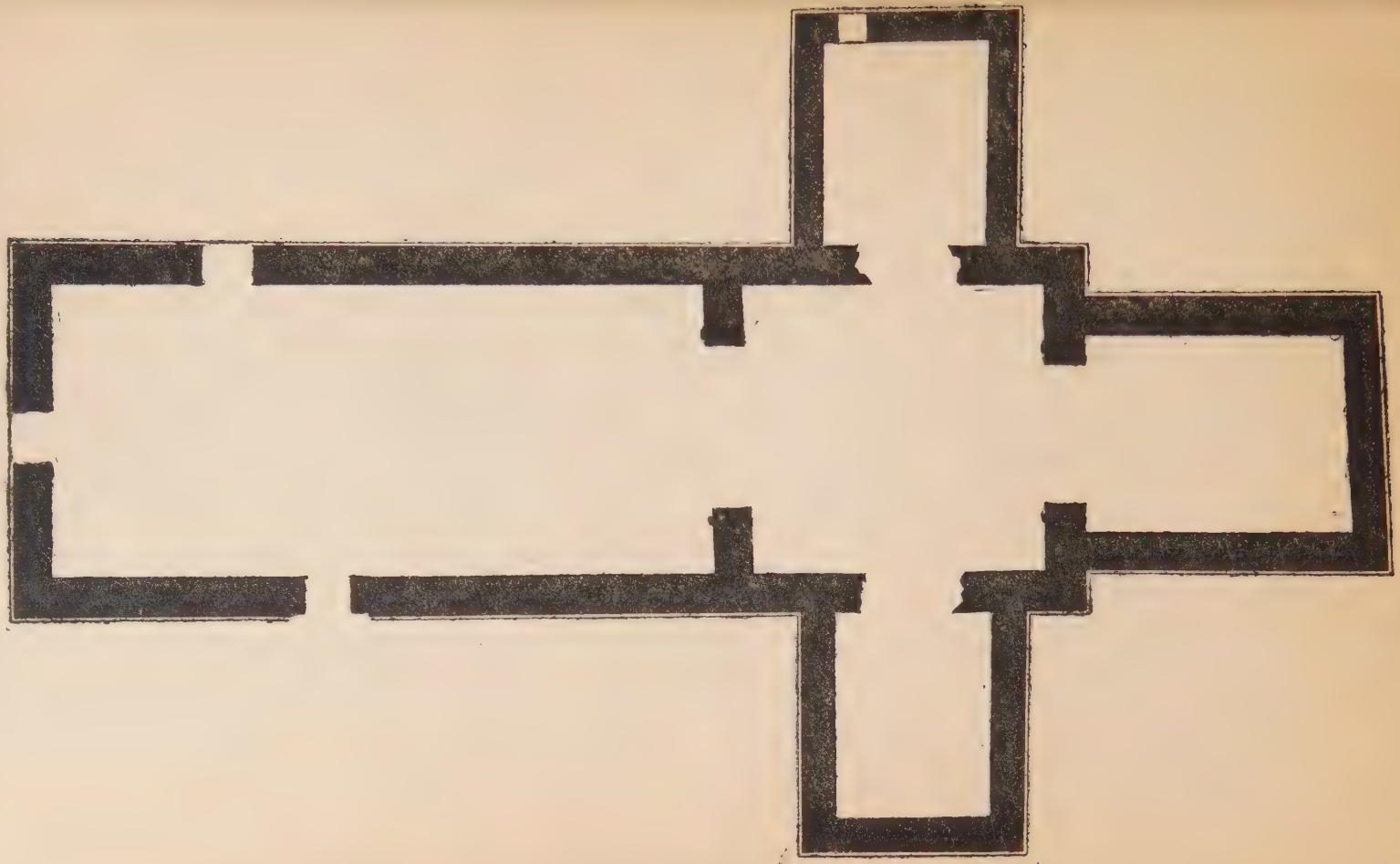


Fig. 171.—Plan of Saxon Church of St. Mary, Dover Castle.

cross which by the middle of the eleventh century was becoming obligatory. Meanwhile quite a distinct line of development was being followed in those examples where we see the tower growing out of the nave walls, and the transepts gradually forming themselves out of the smaller side chapels that were an inheritance from the earliest times. The dates, as already indicated on the evidence of details (ante, p. 281 f.), would agree with this. Britford, Deerhurst, Repton, are early in, or even prior to, the third period, and show the transept still only a side chapel without any evidence of a tower. Breamore, also without specially late indications, shows the growth of both transept and tower, and Worth and Dover their fuller development (Fig. 171).[1] Barton has already established the tower as partly central, and Peterborough, and perhaps Stow, the transepts though only on a crux commissa scheme. For the final outcome of the process of evolution we wait till the latest division of the period, when Stow in its later form and Norton present us with harmoniously combined schemes in which church architecture attains to fairly complete expression.

[1] Fig. 171 is based on a plan in the Irvine drawings. The church is sometimes figured without any indication of transeptal arches, but with the transepts quite open as at Peterborough. The existence of a central tower shows however that there must have been walls here with openings into the transepts, otherwise the tower could not have been carried. The width of the Saxon openings is not known. The present transeptal arches are of the twelfth century.

CHAPTER VIII

THE ARCHITECTURAL STANDARD OF SAXON BUILDINGS

The preceding four chapters have been occupied with a description and analysis of the existing Saxon monuments, followed by some necessarily tentative notes on the chronology and history of the style. It remains now to attempt in a few words a critical estimate of pre-Conquest buildings from the point of view of the general history of the architectural art.

Hitherto the study has been chiefly of extant monuments, and only occasional reference has been made to examples known only from literary sources. To obtain a critical estimate, account must be taken of the buildings that have perished, as well as of those which in part survive.

As was noticed on a previous page (ante, p. 72), the great majority of existing remains are those of churches of the 'village' or 'parish' type, though fragments exist of at least two bishop's churches, Rochester and Sherborne, and of one abbey church of an important establishment, at Peterborough. Besides these there are several monastic churches of lesser rank, such as Oxford (St. Frideswide, later the cathedral), Lyminge and Reculver, Monkwearmouth and Jarrow, and Deerhurst; as well as collegiate churches of secular priests, for this was the status of Stow after 1040, and may have been that of other examples. Most of these monastic and collegiate fanes descended afterwards to the rank of parish churches, in which

character they have come down to us, and it may be said generally that, so far as size and architectural pretension are concerned, the larger village churches of Saxon times were on the average quite equal to those of monastic or collegiate rank.

On pp. 104, 105, 107, 110, 184, 185, 210, are plans of churches of the 'parish' type, most of which would be pronounced below the later average of size, but on the other hand Dunham Magna, p. 225, Britford, p. 228, and St. Martin, Canterbury, p. 120, are normal buildings of their order, measuring 43 ft., 44 ft., and 38 ft. 6 in. respectively, in length of nave, while Breamore, p. 233 (75 ft.), Worth, p. 237 (59 ft.), Wing, p. 268, Bosham, postea, p. 328 (56 ft.), and Repton are decidedly large. The last-named, which was after the Danish troubles only parochial, corresponds in size as well as in general scheme of plan with the monastic Deerhurst. (See ante, p. 231.)

To judge by surviving examples the Saxon village church of stone, though architecturally plain, was a building not far below the average size and pretension of a village church of the later mediaeval period. The dimensions of the naves of about a score of the best preserved Saxon examples both large and small figured on a former page (ante, p. 84) will be found to give an average not very different from that of the naves of twenty Norman or Early English examples, chosen as fair specimens of their classes. The nave, which sufficed for the congregation of the eleventh century, has, in most cases but not in all, received the addition of a north and it may be also a south side-aisle, while the chancel has been enlarged eastward to suit a more elaborate ritual. These additions merely however correspond to the gradual increase in population, which went on till the visitation of the Black Death in the fourteenth century. They were on the same grade of architectural pretension as the rest of the fabric, the general character of which remained unaltered.

The Saxon village church was therefore fairly up to the general mediaeval standard for structures of the kind. Can we

say the same of the more imposing edifices? Did the Saxon cathedral and abbey churches, taking these also on the average, reach the standard of the later Norman and Gothic fanes? The right answer would probably be that while in these important structures the Saxon builder rose fairly to the height of his task, yet the standard of size and splendour mounted, in their case, so rapidly after the Norman Conquest, that the original Saxon structures had perforce to yield to larger and more ornate edifices. From the tenth century to the middle of the fourteenth, the economic condition of the rural villages and country towns did not greatly alter, whereas the resources of the greater abbeys and bishops' sees were enormously increased. From the fiscal point of view, as Mr. Prior has pointed out,[1] striking results followed from the exploitation of the shrines of saints and martyrs, to which pilgrims, with offerings in their hands, flocked in crowds from far and near. The immense store of riches thus accumulated at the shrines of Cuthbert or Becket or Edward II enabled the abbots and bishops of Durham, Canterbury or Gloucester to build and to decorate as lavishly as they might desire, while such a use of their funds was forced upon them by the general tendency of the age.

The age which opens with the settlement of the Normans in England was in fact one of immense architectural activity. It was the ambition of each generation of builders to surpass all that had been done before, and the Normans of the second period treated the earlier efforts of their countrymen with the same scant courtesy that was shown at the Conquest to the Saxon edifices. It is a striking fact that though Archbishop Lanfranc had erected from the foundations at Canterbury a new Metropolitan church that must, at least, have equalled the great abbeys at Caen, yet, within a generation, the priors Ernulph and Conrad pulled down his choir and re-erected it on a scale of transcendently greater magnificence. The Norman abbey

[1] *History of Gothic Art in England*, Lond. 1900, p. 166.

church at Peterborough is more than double the size of the Saxon structure burnt down in 1116, the plan of which has partially been recovered (Fig. 172 postea, p. 315), but the 'glorious choir' of Conrad, at Canterbury, covered about four times the space of that occupied by the eastern part of the cathedral of Lanfranc.

It is no reflection, therefore, on the intrinsic character of the Saxon cathedral and abbey churches that they were all replaced after the Conquest by grander structures. It may be interesting to ask the question—When, and in what circumstances, did this substitution take place?

It is worthy of note that, of the important Saxon churches, the one which lasted longest into the mediaeval period was among the earliest of all. At Hexham, it appears that Wilfrid's edifice of about 675 was still serving as the nave of the extended abbey church up to the devastation wrought by the Scots in 1296.[1] None of the others survived so long, but we need not assume that the Normans condemned them at once as intrinsically worthless. In the case of five of the most important cathedrals and abbeys, Canterbury, York, London, Gloucester, and Peterborough, and in that of Hereford also, the Saxon buildings were ruined by fire within a few years of the Conquest, and had necessarily to be rebuilt; while Rochester, Wells, and St. Frideswide's, Oxford, were in a greatly dilapidated condition. At St. Albans, at the end of the tenth century, a Saxon abbot set on foot, though he did not carry out, a grand scheme of re-building, which points to the fact that the actual structure was recognized as small or faulty. At the important sites of Winchester, Ely, Durham, Worcester, Exeter, the re-building seems to have been deliberate. Worcester was re-constructed by its Saxon abbot Wulfstan, who pulled down the structures of

[1] The *Chronicle of Lanercost* (Bannatyne Club ed., pp. 174-5), ad ann. 1296, tells us that in that year 'ipsa vero basilica Romano opere insignita ad honorem . . . Sancti Andreae . . . beati Wilfridi ministerio exstitit dedicata.'

his predecessor, Oswald, because they were not large enough, though he shed tears at an act which seemed to him to savour of sacrilege.[1] At Exeter, the first Norman bishop was thought to show a certain want of spirit and ambition, in that he was content with the ancient buildings of the abbey ascribed originally to Æthelstan and restored after the Danish wars by Cnut. An ancient seal, attached to some charters in the possession of the Exeter Dean and Chapter, is believed to give a representation of the façade of this edifice (see Fig. 147 ante, p. 243). Such as it was however, the second Norman bishop, Warelwast, was not satisfied with it, and commenced in 1112 a new pile of which the well-known transept towers are surviving portions. At Winchester and at Ely the Normans found on the sites buildings dating in all essentials from the great era of church restoration in the latter part of the tenth century. Such buildings might have stood for hundreds of years, but they were completely removed and new edifices constructed from the foundations by the first Norman bishop and abbot.

The facts here noted and the exclamation of Wulfstan of Worcester, 'Wretches that we are, we destroy the work of our saintly forbears because we think in our pride that we can do better,' testify to the new ambitions which inspired the greater architectural undertakings after the Conquest, but still allow us to credit the Saxon fanes with some nobility of proportions and workmanship. They had been in their day fully sufficient for their purpose. Wilfrid's church at Hexham, even in the twelfth century, excited the admiration of the contemporaries of William of Malmesbury. The writer just mentioned understood architecture, and we owe to him some instructive critical remarks. It is he who notes the novelty of the style of the Confessor's church at Westminster, the first example in England of Norman

[1] Nos, inquit, miseri Sanctorum opera destruimus ut nobis laudem comparemus. W. of Malmes. *Gesta Pontificum*, Rolls Series, No. 52, p. 283.

building,[1] and signalizes the fine jointed Norman masonry employed by Bishop Roger of Salisbury.[2] It means something therefore when he tells us that those who had visited Italy seemed at Hexham to see the glories of Rome revived before their eyes, and himself remarks of the Saxon church at Malmesbury, either Aldhelm's or a reconstruction of the tenth century, that the whole fabric remained untouched and conspicuous to his own time, surpassing in beauty and in size every ancient building that was to be seen in England.[3] At the beginning of the twelfth century Edmer, who had been to Rome with Anselm, writes of the Saxon cathedral of Canterbury, begun by Augustine and enlarged by Archbishop Odo about 950, as having been built partly in imitation of the great Roman church of the prince of the Apostles. The Saxon cathedral at Durham, erected at the end of the tenth century, was, according to Simeon of Durham who had seen it, a stone church of fair appearance and magnitude (honesto nec parvo opere) but it was replaced a hundred years after by a Norman edifice larger and of grander show (nobiliori satis et majori opere).[4]

Such testimony from intelligent writers familiar with the achievements of Norman architecture justifies us in assuming that the Saxon cathedrals and abbey churches, more especially when a building was cathedral and abbey church in one, would fairly have held their own with continental monuments of the same period. These cathedral-abbeys and the other Benedictine houses of the first rank belonged to wealthy and pushing communities, and such monastic churches as those of Winchester, Peterborough, St. Augustine and Christ Church, Canterbury, St. Alban, Glastonbury, or Gloucester, would have exhibited the best architecture of which the time and country were capable. We can only test this monumentally in the case

[1] *Gest. Reg.* ad ann. 1066. [2] ibid, ad ann. 1119.
[3] *Gest. Pont.* loc. cit., p. 361.
[4] *Hist. Dunelm. Eccl.* Rolls Series, No. 75/1, p. 81.

FIG. 172.—Foundations of eastern part of Saxon abbey church at Peterborough.

of Peterborough, where the plan of the eastern part of the Saxon abbey church has been preserved (Fig. 172). From what exists we can judge of nothing more than the shape and size of the edifice. The former suggests the Early Christian T form, and seems to place it in the seventh century. The latter, which should be compared with the size of the other plans, all on the same scale, given in this volume, seems decidedly imposing. The width across the transepts was 92 feet. The length of the nave is not known. The large scale of this early monastic church enables us to understand the remarkable size of the daughter establishment at Brixworth (Fig. 151 ante, p. 248). The imposing dimensions of Brixworth make it all the more likely that these relics of the mother church are of the same early period, while the transept at Peterborough may account for the presbyterial space arranged for at Brixworth before the apse.

At the time therefore of the Norman Conquest, it may be assumed that the chief ecclesiastical sites were supplied with buildings corresponding to the demands of the age. The fact that in every case these Saxon edifices have yielded place to later structures may be taken to show that, though sufficient in their time, they were not up to the later mediaeval standard in size, solidity, or architectural character.

Passing now from the question of the scale of the monuments, to that of their planning, we may ask whether Saxon buildings simply reproduced the standard patterns found elsewhere or showed evidence of boldness and novelty in architectural design. Even about our churches of the smaller type we have found such evidence. The disposition of the porch in its different situations; the growth of the lateral porch into the transeptal chapel, and of the transeptal chapel, through the widening of its door, into the transept, is a piece of architectural evolution which shows a certain originality and independence in the Saxon builders. The position of the

characteristic north and south doorways, the erection of a tower over an earlier porch, the western axial tower in its relation to western divisions in naves, the growth of the central tower and its ultimate independence of the parts that abut against it, are points of interest that give life and individuality to the story of our early mediaeval building. It is true that these and similar innovations, the list of which it would be easy to extend, might be put down as mere insular peculiarities with no architectural significance of a general kind. Apart from these however, there are facts attested by literary records which seem to exhibit certain Saxon monuments as distinct landmarks in the architectural history of the west.

From this point of view the accounts we possess of the church erected by Wilfrid at Hexham between 672 and 678 A.D.[1] are among the most important documents that exist about the architecture of the seventh century, an era when the transition from Early Christian to Romanesque forms was already in progress. The fullest account we owe to Prior Richard of Hexham in the twelfth century,[2] who gives us the impression of so elaborate a structure that, if his notice stood alone, we should conclude it referred to some later rebuilding rather than to the actual work of Wilfrid. Wilfrid's own choirmaster Eddius however describes the building in almost the same terms, and we obtain in this way contemporary evidence for features we should certainly not expect to find together in this remote region and at so early a date. Eddius tells us that the building in its lower parts contained certain chambers in the earth wrought of well-polished stones, while above ground it was of many parts, supported by numerous columns and side aisles or chapels (columnis variis et porticibus multis suffultam) while the walls were of notable length and height. It had lines of passages with many windings that led

[1] The chronological indications for the dates of Wilfrid's churches at Ripon and Hexham are given in Plummer's Bede, II, 318.

[2] Twisden, *Decem Scriptores*, Lond., 1652, col. 290.

sometimes up and sometimes down and communicated by winding stairs.[1] Prior Richard adds the important notes that the walls were in three stories (tribus tabulatis distinctos), that there was an 'arch of triumph' or chancel arch ('arcum sanctuarii' which does not necessarily imply an apse), and that this arch, together with the capitals of the columns, was enriched with carvings in relief (variis celaturarum figuris ex lapide prominentibus). Furthermore that there were many oratories in the aisles or chapels (in ipsis porticibus) with sundry altars of the Virgin, St. Michael, St. John, and the holy apostles, martyrs, confessors and virgins, some of which to the writer's own day seemed still to rise like towers or outworks above the rest of the fabric. All these indications bear out the appellation 'multiplex domus' given to it by Eddius, and incline us to credit him when he concludes by saying that no such edifice had up to his time been heard of on this side the Alps.[2]

[1] *Historians of the Church of York*, Rolls Series, No. 71/1, p. 33.

[2] The two passages referred to above are of such importance that the reader may be glad to possess them in the original. That from Eddius runs as follows:—Nam in Aegustaldesae . . . domum Domino in honorem Sancti Andreae Apostoli fabrefactam fundavit; cujus profunditatem in terra cum domibus mire politis lapidibus fundatam, et super terram multiplicem domum columnis variis et porticibus multis suffultam, mirabilique longitudine et altitudine murorum ornatam, et variis liniarum anfractibus viarum, aliquando sursum aliquando deorsum per cochleas circumductam, non est meae parvitatis hoc sermone explicare; quod sanctus pontifex noster, a Spiritu Dei doctus, opera facere excogitavit; neque enim ullam domum aliam citra Alpes montes talem aedificatam audivimus . . . ornamenta hujus multiplicis domus de auro et argento lapidibusque pretiosis. . . .

The passage from Prior Richard's account of Hexham church is in part an amplification of what Eddius has written, but contains independent architectural statements of value. It belongs to about the middle of the twelfth century when, as we are told (ante, p. 312), Wilfrid's church was still standing.

Descriptio Hagustaldensis Ecclesiae. Igitur profunditatem ipsius ecclesiae criptis et oratoriis subterraneis, et viarum anfractibus, inferius cum magna

At Hexham moreover as we have seen, at a somewhat later date, Wilfrid erected, or at any rate began, another church, dedicated to St. Mary, that had apparently the plan of a Greek cross and consisted in a central part which rose in a rounded shape like a tower, and four projecting portions on the four sides.[1] The importance of this building, and of its central tower-like feature, perhaps an octagon, in connection with cruciform plans in general, was noticed on p. 286.

Another historically important structure of somewhat later date was the church at York, rebuilt about the middle of the eighth century and described in verses attributed to the famous Alcuin. Alcuin was well acquainted with the best that Carolingian architecture had achieved in the Frankish domains, and his praise of the church is therefore of value.

industria fundavit. Parietes autem quadratis, et variis, et bene politis columnis suffultos, et tribus tabulatis distinctos immensae longitudinis et altitudinis erexit. Ipsos etiam et capitella columnarum quibus sustentantur, et arcum sanctuarii historiis, et imaginibus, et variis celaturarum figuris ex lapide prominentibus, et picturarum et colorum grata varietate mirabilique decore decoravit. Ipsum quoque corpus ecclesiae appenticiis et porticibus undique circumcinxit, quae miro et inexplicabili artificio per parietes, et cocleas inferius et superius distinxit. In ipsis vero cocleis et super ipsas ascensoria ex lapide et deambulatoria et varios viarum anfractus modo sursum modo deorsum artificiosissime ita machinari fecit, ut innumera hominum multitudo ibi existere, et ipsum corpus ecclesiae circumdare possit cum a nemine tamen infra in ea existentium videri queat.

Oratoria quoque cum plurima superius et inferius secretissima et pulcherrima in ipsis porticibus cum maxima diligentia et cautela constituit, in quibus altaria in honore beatae dei genetricis semperque virginis Mariae et Sancti Michaelis archangeli sanctique Johannis Baptistae et sanctorum Apostolorum, Martyrum, Confessorum atque virginum cum eorum apparatibus honestissime praeparari fecit. Unde etiam usque hodie quaedam illorum ut turres et propugnacula supereminent. . . .

Atrium quoque templi magnae spissitudinis et fortitudinis muro circumvallavit.

[1] (Ecclesia) mirandi operis, et ipsa scilicet in modum turris erecta et fere rotunda, a quatuor partibus totidem porticus habens, in honorem Sanctae Mariae semper virginis dedicata. Twisden, loc. cit. col. 291.

The lofty roof of it, he tells us, was upborne by massive columns, and aisles and chapels flanked the main edifice and contained in all no fewer than thirty altars.[1] The notice of the building of Ramsey abbey church, c. 970, has already been placed before the reader (ante, p. 241 f.), while from the same important building epoch of the end of the tenth century we have an elaborate but confused account of the new fabric of the Old Minster at Winchester.[2] This seems to have been an extensive work, but in the description no special feature of historical moment seems to present itself. Hexham and York, on the other hand, are places to be noted on any map that illustrates the development of ecclesiastical architecture in the West. The work done there about 675 and 780 appears to have had distinct originality and boldness, and Hexham, at any rate is a landmark of architectural progress.

In order to estimate the importance in western architecture of Wilfrid's buildings, it will be convenient to glance for a moment at the general course of evolution by which the mediaeval styles were formed. In the Early Christian architecture of the West the one standard form for churches used for congregational assembly was the basilica, though it was by no means the only form known to Christian builders. Now this Early Christian basilica has been made to do more than its fair share of work in the development of ecclesiastical architecture. It has been assumed that the basilica and a few centuries of time were all that was needed for

[1] Haec nimis alta domus solidis suffulta columnis,
Suppositae quae stant curvatis arcubus, intus
Emicat egregiis laquearibus atque fenestris,
Pulchraque porticibus fulget circumdata multis,
Plurima diversis retinens solaria tectis,
Quae triginta tenet variis ornatibus aras.
Historians of the Church of York, loc. cit. p. 394.

[2] Commented on by Professor Willis in the 'Winchester' volume of the Archaeological Institute, Lond. 1845.

the production of the Romanesque church of the later middle ages, but the truth is, that the basilica, when taken by itself,[1] was strangely lacking in the necessary principle of growth. The Romanesque church derived from the basilica the main scheme of its rectangular plan, its division into nave and aisles and clearstory lighting, and its apsidal termination, but for its other chief characteristics, such as stone vaults, the use of pillars instead of columns in arcades, a choir as the extension of a nave, the central pavilion or tower, galleries over side aisles, façades composed with a tower or towers, and the like, we have to look to other buildings than the basilicas. It is not too much to say that the supposed progressive modification of basilican forms, by which Romanesque architecture is sometimes explained, is really a figment of the imagination. The Romanesque style depended for its formation, not on the modification of the basilica from within, but on the grafting on the simple basilican scheme of more elaborate architectural features that originated elsewhere. The source of these is to be sought in the round or polygonal and the cruciform churches, that were erected from the earliest times, not always for worship, but more often for memorial or sepulchral purposes, or simply as baptistries. These exceptional buildings show from the first far more architectural character than the basilicas. Their plans are more complicated, but at the same time more compact, their technique more advanced, their construction more daring and masterly.

Buildings like San Lorenzo at Milan, San Vitale at Ravenna, and Charles the Great's octagonal church at Aachen, contain all the constructive and artistic elements that in different combinations make up the Romanesque church. They exhibit, first, a central space with a side (or rather concentric) aisle, vaulted itself and carrying a vaulted gallery opening into the central space, which is also covered with a dome in masonry. Access to the gallery is gained by stairs in stair-

[1] Ante, p. 14.

turrets, and these, at San Vitale and at Aachen, are grouped on each side of an entrance-porch, thus prefiguring the most characteristic feature of the Romanesque elevation. At both these places we find even that special mark of advancing Romanesque, the rectangular choir or chancel preceding the apse.

Here there are most of the characteristic features of Romanesque architecture, and all that the mediaeval builders had to do was to combine these with the rectangular plan, which was the contribution of the basilica. When and where the necessary steps were taken it is impossible, in the present state of knowledge, to say. It is clear that the basilica in itself contained no principle of growth, or we should be able to trace the beginnings of Romanesque at Rome and at Ravenna. At Ravenna however the basilica maintains throughout its simplest fundamental form of nave and side aisles, with semicircular and unstilted apse opening directly into the former, and the latter unprovided with galleries. At Rome certain innovations on the bald basilican form made their appearance, but in such a way as to show that they were rather accidents than stages in a progress.

It is curious indeed to note how unprolific in new architectural forms were the builders of Rome herself during the early mediaeval period. Rome, the mother of ecclesiastical statescraft, was in matters of art the most unproductive of all the centres of the West. As her architects had constructed in the fourth century so they continued to build in the twelfth and thirteenth, and after one solitary attempt at Gothic at Sta. Maria sopra Minerva, the Early Christian style passed at once into that of the Renaissance. This is a fact to be remembered when we find mediaeval writers speaking of Rome as a place of architectural inspiration.[1] For the

[1] W. of Malmesbury, *Gesta Pont.* loc. cit., p. 255, states that Wilfrid brought masons with him from Rome to carry out his English work. The early authorities do not tell us this, and for 'Rome' we should certainly understand 'Romanized lands,' especially Gaul.

seats of the new experiments in construction and planning which transformed the Early Christian into the mediaeval style, we should probably be right in looking away from Rome altogether to the more northerly districts of Italy, the metropolis of which is Milan, and beyond the Alps to centres like Cologne, or Tours, or our own York. Here classic and barbarian elements of culture met and mingled, and though there may not be anything specially Teutonic in the forms thus evolved, it may well have been the case that the contact with new social forces embodied in the northern peoples stimulated inventive genius in the alumni of the older schools. The centuries from the sixth to the ninth must have been in this respect of great importance, and it is a matter of some national pride to find that, in one conspicuous instance, these churches built by Wilfrid Hexham at the close of the seventh and beginning of the eighth century, our country was doing its full share of work in the formation of the mediaeval styles.

For in what Eddius and Prior Richard tell us, the special interest lies in the fact that Wilfrid erected in the same place, though not at the same time, both a basilican church and one of a central type, and appears to have employed for the first some of those more advanced architectural forms that belong historically to the latter. The buttressing up of a central mass with side-buildings so as to form a varied composition, is what seems to be implied in the descriptions of the larger church, and this is the special characteristic of the central church, noted as belonging to it as early as the time of Constantine, whose polygonal edifice at Antioch is described by Eusebius[1] in words that read like a Greek edition of Prior Richard's Latin eulogy of the Hexham basilica. The galleries which are implied in the mention of the winding staircases of stone, are features of the central church, as we find it at San Vitale, and the 'three stories' would be formed by such

[1] *Vit. Const.* III, 50.

galleries between the arcades on the ground floor and the clearstory.

The multiplication of altars is a Romanesque feature into the ecclesiastical reasons for which we need not enter here. At the beginning of the ninth century the church on the Plan of St. Gall possessed seventeen altars and we are reminded of the thirty altars of the church at York in the century before. Wilfrid's Hexham church had 'oratoria quam plurima . . . in quibus altaria' . . . but whereas on the St. Gall Plan the altars are just located in the nave and aisles without any architectural provision for their reception, Wilfrid's were in those adjuncts with which he 'encircled on every side the body of the church,' and this would imply some architectural provision for the altars, like the side-chapels and apses, that became so common in Romanesque buildings, but in Early Christian times were confined to the central churches. We cannot say that Wilfrid directly borrowed these features for his basilican church of St. Andrew from his central church of St. Mary, for as a matter of fact the latter was posterior in date, but Wilfrid or his architectural advisers must, one would think, have had the central form of church with its structural possibilities in their minds all the time.

In the architectural work which Wilfrid and his builders were doing they were not of course alone. The accounts we possess of some of the more important churches in Gaul, of a period still earlier than Wilfrid's, give us the same impression of a bold and innovating treatment of the traditional Early Christian forms. The church built by Bishop Naumatius of Clermont, the husband of the art-loving dame,[1] in the fifth century, and still more the basilica erected by Bishop Perpetuus of Tours over the tomb of St. Martin about 470 A.D., deserve the title epoch-making, and the latter is credited by some modern authorities with originating the noble French tradition of the ambulatory round the apse. There seems however fair

[1] Vol. 1, p. 127.

ground for claiming for Wilfrid a certain priority in starting that transference of features of plan and construction from the more architecturally advanced central buildings to the basilicas, on which the development of mediaeval church architecture so largely depended.

The claim here made for Wilfrid's work as bold and innovating may seem somewhat forced in face of the fact that later Saxon work showed no special distinction, and yielded ultimately without a struggle to that of the Normans. This is only however in accordance with the phenomena of Saxon history in general, in which, as we have already noticed, seasons of brilliant promise are succeeded by long eras of national eclipse. It is from this point of view quite in accordance with natural likelihood that the age of conversion was one of such stimulus to the artistic powers of the people that a level of effort and achievement was reached which subsequent generations were not able to maintain. The carved crosses and the coins certainly degenerate in artistic value as the centuries pass away, and the fine barbaric gold and encrusted work is early in date. So too the architectural efforts of the seventh century may well have shown an originality and vigour of which the style was never afterwards capable.

These considerations will bear out what was said at the opening of this chapter, and may serve to correct any unduly depreciative estimate of Saxon architecture which might be formed on a survey of the existing remains alone. Could we restore in thought the earlier monuments which have perished, our estimate of Saxon buildings might be a higher one.

It is probable however that the architectural treatment of elevations would have been everywhere the same, and we must picture to ourselves the plans just under discussion carried out with that mingling of originality and force with clumsiness which gives its stamp to all the achievements of the Saxon masons. Over and above his innovations in planning, the Saxon

caementarius had practical skill, as well as ideas as to effect, in building, though he is constantly betraying his amateurishness and want of discipline in the orthodox traditions of his craft. He could put his materials together in workmanlike fashion, for the very thin walls which he inherited from the Roman builders have lasted well through the centuries, and can bear a considerable superstructure. The walls of the tower at Barton-on-Humber, which was increased in height in later times, are as thin as those of the western adjunct, yet the tower is perfectly solid to this day. Monkwearmouth and Bardsey towers rest on walls not 2 ft. in thickness.

The idea of the megalithic was very commonly at work in the Saxon builder's mind. He uses big material whenever he can procure it. The large squared stones of his quoins, his flat lintels, and slabs of large superficial area that line his door-jambs, are often but by no means always Roman stones re-used. Where these last are not available he cuts the blocks for himself, as at Earls Barton and Worth (ante, pp. 187, 236), and is not averse from the trouble of hoisting these aloft, as for the top of the window openings at Escomb (Fig. 67, ante, p. 115). The trapezoidal impost is a good illustration of his practice (Figs. 46, 59, ante, pp. 96, 108).

The Saxon builder possesses as we have seen his own stock of forms, and in consequence his work, when any details are present, is as a rule easily recognized by its distinction from the Norman which succeeded to it. There are it is true 'transitional' buildings about which a decision between Saxon and Norman is difficult (ante, pp. 82, 217), but these could only be properly discussed in connection with Norman architecture generally. A good illustration of the distinction which generally obtains between the two kinds of work is given by the two blocked doorways shown in Fig. 172 bis. Both look equally antique and both are generally reckoned pre-Conquest, but the square hood-mould and imposts formed with tile-like

pieces at A, are just as characteristically Saxon as the joggled lintel and tympanum filled with stones set diamond fashion of B are characteristically Norman. Finally the Saxon designer is beyond question a man of some initiative, a seeker, or perhaps only a groper, after architectural effect, and work like the enrichment of the wall surfaces at Earls Barton and Bradford-on-Avon, or on the nave at Geddington, is carefully schemed though in parts quite ungrammatical.

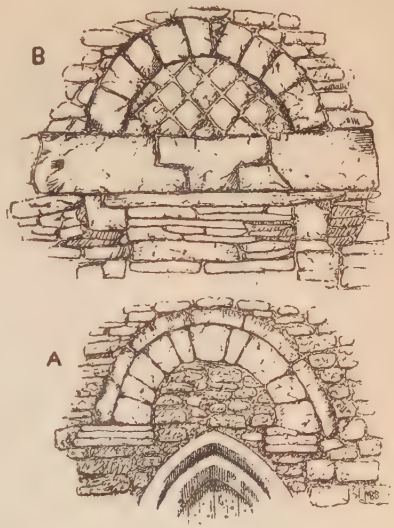


Fig. 172 bis.—Blocked doorways.
A. Miserden, Gloucestershire [Saxon].
B. Hatfield, Herefordshire [Norman].

The architecture thus produced had not consistency and method enough to constitute in the technical sense a style, but there were in it qualities which might have been worked out under favourable conditions into a style. It has been described above (ante, p. 69) as constituting a 'province of Austrasian Romanesque,' but it was an autonomous province, whose alumni dealt with the common stock of forms in independent fashion and held with tenacity to certain peculiarities which were their own. We may take leave of this curious architectural phase, which must always possess for ourselves a high degree of interest, with a parting glance at a very characteristic monument with which we have already made acquaintance, the Late Saxon church at Bosham in Sussex (vol. 1, p. 104).

Bosham presents to us a Saxon western tower, a nave either of Saxon fabric or on Saxon lines, a chancel arch that is one of the most characteristic specimens of the period, and an original chancel greatly extended in later times.

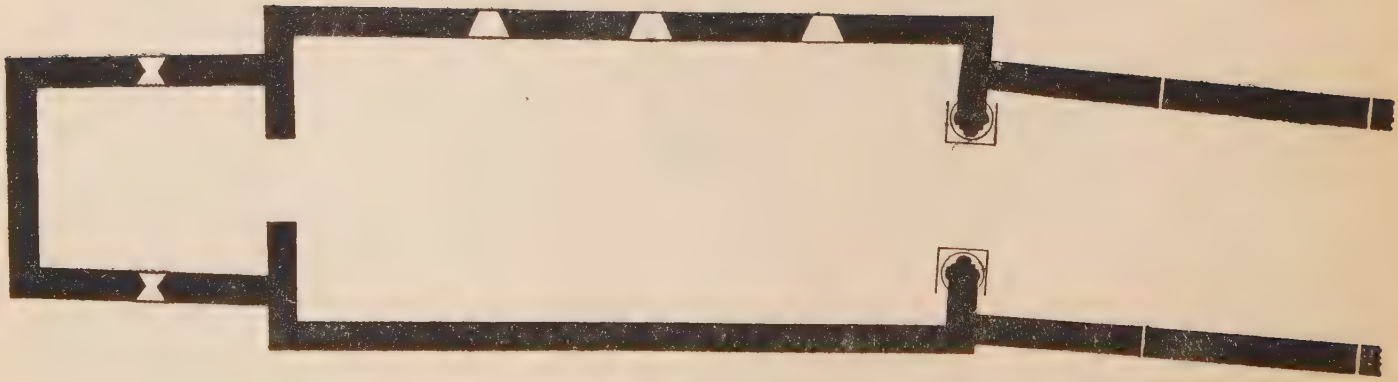


Fig. 173.—Plan of Bosham Church, Sussex.

[The breaks in the walls of the chancel denote extensions, first in the Early Norman, and afterwards in the Early English period.]

Fig. 173 gives the plan.[1] The tower is quite unadorned and its original belfry openings are blocked. The apertures toward the nave have been noticed (ante, p. 170). The plan, as will be seen at a glance, has been set out with more than mediaeval indifference to exactness of measurements and squaring, and the chancel diverges phenomenally from the axis of

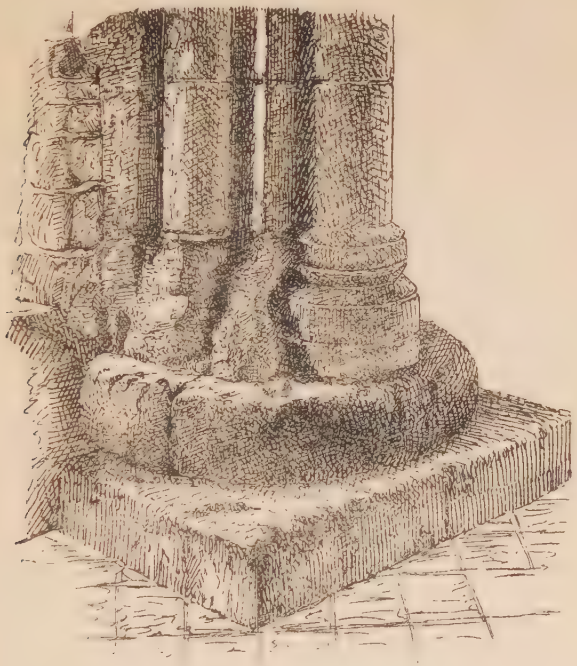


Fig. 174.—Jamb of chancel arch, Bosham.

the nave. The elevations are gaunt in their plainness and the now unplastered rubble work is rough and uncomely, but the dimensions are ample, the walls lofty, and the chancel arch undeniably imposing. Fig. 174 shows the lower part of the northern jamb, and there is no feature in any Saxon building that is more characteristic. The jamb, which

[1] The writer thanks Mr. Edward S. Prior for kind help in the preparation of the plan of Bosham.

possesses a soffit shaft and angle shafts, is bedded on two huge slabs, a square one measuring 4 ft. west to east and 9 in. high, and another above it in the form of a circular disc 3 ft. 6 in. in diameter by 9 in. in height. These slabs are commonly attributed to the Romans, but it is not easy to see what part of a Roman building they can ever have formed. The truth is that they bear no resemblance to known classical features, while they are on the other hand characteristically Saxon. The nearest parallel to them is to be found in the imposts of the chancel arch at Worth, Sussex, a place far away from Roman sites. The Worth imposts, like the bases at Bosham, are huge and ungainly, testifying both to the general love of bigness in the Saxon builder, and his comparative ignorance of the normal features which in the eleventh century were everywhere else crystallizing into Romanesque. Saxon England stood outside the general development of European architecture, but the fact gives it none the less of interest in our eyes.

APPENDIX

NOTE ON INDEX LIST AND MAP OF SAXON CHURCHES

In the following list will be found in alphabetical order the names of the places where masonry of Saxon character is still to be seen, while the accompanying map, at p. 344. indicates their local distribution. The criteria according to which a place on the list has been adjudged or refused have been sufficiently explained in what has gone before. No account has been taken of the mere appearance of antiquity in a building, nor of local or historical considerations which may point to a pre-Conquest date for particular examples. The inclusion of a church in the list has been determined by the appearance or definite features which are known to be Saxon. These features are in any case worth cataloguing, though in a few isolated instances they may represent a survival of Saxon forms in post-Conquest buildings. The percentage of such survivals is probably greatest in the East Anglian region, where the Saxon peculiarity of the double-splayed window appears in what must certainly be Norman work on the western side of the cloisters at Norwich cathedral. So far as that region is concerned, the fact casts a doubt on the validity of this particular criterion, and wherever in that part of England we have only double-splayed windows to judge by, some uncertainty must attach to decisions. In other parts of the country reliance on

special features of the kind seems thoroughly to be justified. Where they are present other considerations are almost always in favour of a Saxon ascription.

There are numerous other buildings in different parts of the country that are possibly in part pre-Conquest, and in a few there is a strong probability that this is the case, but in the absence of definite indications these have all been omitted. The following rejected examples may be mentioned to show the class of building referred to:—Stamfordham, Northumberland; Aycliff, Durham; Hawkeswell, Ainderby Steeple, Collingham, Hooton Pagnell, Maltby, Stainton-by-Tickhill, Yorkshire; Sandiacre, Sawley, Derbyshire; Offchurch, Warwickshire; Rushbury, Shropshire; Iver, Bucks; Cholsey, St. Leonard Wallingford, Berkshire; Minster-in-Sheppey, Shorne, Leeds, Cheriton, Kent; Old Shoreham, Ford, Lyminster, Sussex; Netheravon, Wiltshire; Ashchurch, Upleadon, Gloucestershire; St. Woolos, Newport, Monmouthshire; Tintagel, Cornwall.

In the case of each example included in the list there is furnished a very brief indication of the amount of Saxon work to be seen in the building, and of any features of special interest which this work may offer. It is of course impossible in the few words used to give a complete inventory, and all that is offered is some general guidance as to what the investigator may expect to find upon the spot. Where the building or any feature of it has been discussed in the text a reference is given to the page.

The indications as to date are of a general kind, and the significance of the letters A, B, C,[1] C,[2] C,[3] has been already explained, ante, p. 289 f. The criteria of date are discussed, ante, p. 273 ff., and it may be repeated that the ascriptions to period B, corresponding to the Danish epoch of 800-950, are in most cases merely tentative. Only in the case of St. Michael, St. Albans, do we get literary evidence of a date within these limits. The middle sub-period of the

last epoch, C,[2] corresponding to the time of Cnut, can claim on documentary evidence two examples, Greenstead, Essex, and (in part) Stow, Lincolnshire; the few other ascriptions to the time are conjectural. The examples which only present long-and-short work, as we have seen (ante, p. 289) may belong either to period C or period B.

It should be explained that the words 'tentative' and 'conjectural' do not imply that dates have been assigned by guesswork. In each case there is some definite reason for the ascription, though the evidence in its favour may not be conclusive. Some critics have adopted a summary method by which a few examples have been accepted for the seventh century and all the rest congregated in the first half of the eleventh. Now it is true that in Europe generally the latter period was one very fertile in new architectural undertakings, but in England it seems to have been the last half of the tenth, the time of Edgar, that showed this special activity. It is a significant fact, attested by the episcopal lists given in Stubbs's *Registrum Sacrum Anglicanum*, that certain bishoprics were in abeyance during parts of the centuries of Danish ravage, and were reconstituted in the time of Edgar. The revival of the bishopric meant of course the rebuilding or restoration of the episcopal church, and considerable building activity in the parishes round about. In the same reign also the *Anglo-Saxon Chronicle* tells us (ad ann. 963) that Æthelwold of Winchester begged of King Edgar 'all the minsters which heathen men had formerly broken down, because he would restore them: and the king cheerfully granted it.' This points to an extensive restoration of monasteries for which too we have other evidence, while we know that some abbey churches were restored at the same time as parochial. Hence a certain amount of English work, that might be of the eleventh century, but which shows early indications, has in the following list been assigned to the last half of the tenth.

Even in the Danish period we have notices of church

building, such as that which tells of Swithun of Winchester who died in 862, how that he was 'a diligent builder of churches in places where there were none before, and a repairer of those that had been destroyed or ruined.'[1] Hence when indications seem to point to a date before the Edgar revival for a church that does not at the same time seem one of the earliest, an ascription to period B may, provisionally, be registered.

These explanations may redeem from a charge of dogmatism the indications of date which follow, and it is believed that the reader will be glad of, or even expect, such an expression of the writer's views as to chronology, even though it make no pretensions to finality.

[1] *Acta Sanct.* Jul. 1, 291.

INDEX LIST OF SAXON CHURCHES.

[After name and county there follows an indication of date by means of the capital letters A, B, etc. The words within brackets give a summary of the amount and character of Saxon work now visible, and references immediately following the brackets direct to the page or pages where the general notices of the examples will be found. References to special features follow. An asterisk implies an illustration.]

St. Albans, Herts, St. Michael, B (nave of c. 950, arcades later), date, 288; windows, 298.

Alkborough, Lincolnshire, C^3 (western tower).

Appleton-le-Street, Yorks, C^3 (western tower).

Arlington, Sussex, C^1 (main fabric), 292.

Avebury, Wilts, B (main fabric) date, 288; windows in two tiers, 172, 298.

Bardsey, Yorks, B (possible porch-tower), 56; plan, 156*; shaft, 200*; thin walls, 326.

Barham, Suffolk, C or B (fragment of long-and-short work).

Barholm, Lincolnshire, C^3 (enriched south door), 181*; string course, 236.

Barnack, Northants, C^1 (western tower and details), 205 f., 185, 208, 214; date, 290; doorway, 103; imposts, 181*, 205; pierced mid-wall slab, 203*; pilaster strips, 36; plan, 205*; recesses, 207; tower arch, 127, 206*.

Barrow, Salop, C^3 (chancel).

Barton-on-Humber, Lincolnshire, C^1 (tower and western adjunct), 208 f.; baluster shafts, 91*, 175, 196*; cap, 179-80*; date, 291 f.; doorway, 103; double-splayed lights, 93*; mid-wall slab, 204; mouldings at door, 258; plan, 210*; section, 215*; tower, 238; tower arch, 212, 291; views, 208*, 210*.

Bedford, St. Peter, C (tower, chancel), 226; date, 291.

Bessingham, Norfolk, C[3] (round western tower), 184-5*.

Bibury, Gloucestershire, C (traces).

Billingham, Durham, C[3] (western tower).

Birstall, Leicestershire, C (window with pierced mid-wall slab in chancel), 204.

Bishopstone, Sussex, B or C (south porch, part of nave), 130 f., 137, 155, 227; plan, 131*; sundial, 131; view, 132*.

Boarhunt, Hants, C[3] (main fabric), 104 f.; date, 106; pilaster strip in gable, 106; plan, 105*; view, 106*; western division, 217; window, 93*.

Bolam, Northumberland, C[3] (western tower), corbel cap, 63.

Bolney, Sussex, C (south doorway and perhaps fabric).

Bosham, Sussex, C[3] (complete, chancel lengthened), 172, 327 f.; chancel, 211, 280; chancel arch, 109, 291, 329*; plan, 328*; tower, 157-8, 171*-2.

St. Botolph, Sussex, C[3] (chancel arch).

Bracebridge, Lincolnshire, C[3] (western tower, main fabric), caps, 177 f., 180*; squint, 128; view, 178*.

Bradford-on-Avon, Wilts, C[1] (complete, nave, chancel and north porch), 131 f.; arcading, 135*; carved angels, 139; chancel arch, 127, 138; date, 73, 287; doorway, 127; an ecclesiola, 79; height of walls, 137; plan, 132*; porch, 130, 227; view, 134*.

Branston, Lincolnshire, C[3] (western tower), arcading, 161*; cap, 177, 180*.

Breamore, Hants, C[1] (complete, large church partly cruciform), 226, 232 f.; inscription, 234-5*; plan, 233*; tower, 239; view, 234*.

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